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*Dr. in U.S. Army  
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Steam Engine*

*now lodged*

SECOND ANNUAL REPORT

OF THE

State Board of Health

OF FLORIDA,

JACKSONVILLE, MARCH 29TH, 1891.

JACKSONVILLE, FLA.:  
DaCosta Printing and Publishing House,  
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OFFICERS AND MEMBERS  
OF THE  
STATE BOARD OF HEALTH OF FLORIDA.

R. P. DANIEL, M. D., President, Jacksonville, Fla.

WM. K. HYER, Pensacola, Fla.

WM. B. HENDERSON, Tampa, Fla.

JOSEPH Y. PORTER, M. D., State Health Officer and  
Secretary, Key West, Fla.

Official Postoffice Address, Jacksonville, Fla.

PRESIDENT'S REPORT.

JACKSONVILLE, FLA., March 10, 1891.

*To His Excellency, Gov. F. P. Fleming :*

SIR—At your request I have prepared, and herewith transmit, this my second annual report as President of the State Board of Health of Florida.

This is somewhat in anticipation of the time at which the same document was rendered you last year, it having appeared to me that the intention of the law was that this duty should be performed at the annual meeting of the State Board, which is definitely fixed for the first Monday in May of each year. However, I readily appreciate the desirability of having all documents relative to the various departments in your hands in time to utilize in the preparation of your message to the Legislature ; and I have therefore endeavored to act upon the expressed wish of Your Excellency in anticipating somewhat.

GENERAL HEALTH.

It is with gratification that I am able to report that while the general health of the State has not been exceptionally good during the past year, there has, nevertheless, been no very serious epidemic, and the mortality rate has been favorable.

Dengue prevailed in Tampa and some other towns in South and East Florida during midsummer and early fall ; it was limited in extent and duration, and mild in character.

The wide spread and very serious prevalence of catarrhal fever, or "grippe" as it is ~~properly~~ known, has reached and prevailed extensively over the State during the past three months.

With these exceptions we have been remarkably free from epidemic disease of any kind since I had the honor to render my former report to your Excellency.

It may not be out of place in this connection, however, to call attention to the very considerable proportion of deaths from consumption, as presented in our monthly reports of vital statistics. This is undoubtedly due to the fact that pulmonary in-

*profusely*



valids have been, and are, drawn to Florida by the advantages and attractions of its climate; and thus no inconsiderable proportion of the population, resident as well as transient, belongs to this class; and we are consequently charged up with what we are not responsible for.

The value of a State Board of Health to the public welfare, both in health and pocket, has been demonstrated during the year on two occasions in connection with alarms from reported disease.

In July of 1890 a death occurred in St. Augustine under circumstances justly calculated to cause popular disturbance and alarm. The local Board was unable to handle the situation promptly; a panic with resulting stampede and all its direful consequences to that city, as well as the entire State, was imminent. The State Health authorities were appealed to; the latter took action, immediately, authoritatively and thoroughly; and in less than twenty-four hours the threatened calamity was effectually averted. The State Health Officer being, at the time, in Key West, and consequently not available promptly, I solicited the aid of Dr. Chas. J. Burroughs, Health Officer of Jacksonville, in connection with this particular emergency. It affords me pleasure to testify not only to the cheerful readiness with which this gentleman responded to my request, but likewise to the skill and discretion displayed by him in the execution of so delicate a duty.

The other occasion to which I refer was when the commendably prompt notification was made to our Board by the Health Officer of Savannah, of the recognition of a few cases of small pox in that city. The occasion and conditions have been so successfully utilized by the health authorities of this State that I feel warranted in asserting that a large majority of our previously unprotected population has been vaccinated; and we have thus not only been able measurably to guard against any serious development of a most dreaded disease, but, likewise, to demonstrate that the regulation of the State Board in regard to vaccination can be enforced without detriment to the immediate interests of the people, educational or otherwise.

There have been, during the past three months, more than six thousand vaccine points supplied through our office to various

towns and counties in the State; our Secretary having made such arrangements as enabled him to furnish virus at cost to all who call upon him.

#### RELATIONS WITH OTHER HEALTH AUTHORITIES.

These have been, on the whole, satisfactory, and it is with special gratification that I am permitted to express my high appreciation of the confidence reposed in our integrity—and ability—as guardians of the public health, and as holding an important outpost in danger, from without, by the various health authorities of our neighboring States, more particularly by those of Brunswick, Savannah and Charleston; all of which cities being prominently endangered by any neglect or error on our part.

It is with regret that I must, in this connection, make an exception against the Board of Health of Louisiana. This body has deemed it advisable to place a special inspector in Florida during each quarantine season, for the purpose of espionage and report. This action I have deemed both unjust to us and discreditable to the interests of public health protection, and have formally protested against such course.

It is to be hoped, however, that the provision which has been made at the entrance of Tampa Bay by the State Board of Health for instituting those methods of protection against invasion of Yellow Fever through that and adjacent ports, deemed necessary by the health authorities referred to, may, in the future, remove their anxieties and apprehensions that Florida is a menace to New Orleans. You will please find herewith copies of correspondence on this subject between the President of the State Board of Health of Louisiana and the State Health authorities of Florida.

#### ASSISTANT STATE HEALTH OFFICER.

In accordance with that section of the Act creating a State Board of Health which requires that there shall be appointed an Assistant State Health Officer, I would report that Dr. J. Louis Horsey, of Fernandina, was, at the meeting of the Board in January last, elected, and has accepted an appointment to this office, which was made vacant by the resignation of Dr. W. H. Ross, of Pensacola; and the Board has reason to congratulate itself upon having secured for this position a gentleman who is so competent to assume the responsibilities which he may be called upon to meet.

## WORK ACCOMPLISHED.

For the work accomplished by the Board I shall refer your Excellency more particularly to the report of the State Health Officer and Secretary, which is hereto appended.

There has been some progress made in securing co-operative action on the part of County Boards of Health in the collection and forwarding of vital statistics; but I am persuaded that far more satisfactory results could be obtained by an amendment to the law under which we operate, and which you will find more particularly indicated under the proper caption.

It was not to be expected that there would be a popular appreciation of this element of the work of a Board of Health. It has nothing in it sensational, or calculated to enlist the interest or sympathy of the people; and not unfrequently the enforcement of it presents the offensiveness of an intrusion into the private affairs of individual citizens.

There can be no doubt, however, of the very great value, both from a sanitary and business standpoint, of such statistics when fully and reliably collated for a sufficient length of time; and this is particularly of force as relating to Florida: hence my suggestion as hereinafter made.

There have been employed by the board during the quarantine season of 1890 five inspectors—one each at Port Tampa, Punta Gorda, Punta Rassa, Sarasota, and on the Manatee river.

It has appeared advisable, in view of the constancy and extent of intercourse between that point and Havana, to keep one inspector permanently on duty at Port Tampa, or at least until our quarantine station about being opened at Mullet Key can be put in operation.

There could well be employed, under the direct control of the board and with large advantage to the interests involved, special inspectors at several other points on the Gulf coast of our State, did the financial resources of the former warrant. Indeed, I have become convinced that were the whole machinery of Port Sanitary Inspection and Quarantine placed under the immediate control and direction of the State Board of Health, and operated by employees directly responsible to and paid by this body, that the latter could more efficiently and effectively

execute its own duty and more securely protect the public health and interests.

The board has, as indicated in my last report to your Excellency, erected, through responsible contractors and under competent and careful supervision, a Quarantine and Disinfection Station on Mullet Key, near the entrance to Tampa Bay. This Quarantine Station will be furnished with all necessary appliances required to accomplish the greatest protection against risk of importing infectious or contagious disease, with the least amount of detention to travel or obstruction to traffic practicable.

It is not contemplated that vessels on which Yellow Fever, Asiatic Cholera or Small-pox may prevail, at the time of their arrival, shall be detained and cared for at this station; unless the demands of humanity should imperatively require this course. Such vessels will be ordered to the nearest United States Refuge Station.

The methods and appliances which are to be employed at Mullet Key are similar to those already in successful operation at New Orleans and Charleston, and which have received the endorsement of the highest public health authorities of our country.

It affords me much gratification to be able to report that the Board of Health of Escambia county has had the wisdom to contemplate, and financial ability to construct, an establishment of a similar character on Santa Rosa Island, near Pensacola. This latter city certainly has claim for congratulation that her health board is possessed of qualities which have enabled it to attain so enviable an ability to protect the health and facilitate the interests of her citizens.

It is the desire and intention of the State Board of Health, so soon as its pecuniary resources will possibly permit, to erect and operate at Key West a plant of similar character to that which is just being completed at Mullet Key. The Board fully appreciates the extraordinary difficulties which are liable to present themselves at the former port in the execution of its duties; and, likewise, the peculiar hardships that may temporarily result therefrom, to private interests; and consequently it feels that these conditions must be rendered less difficult and onerous so soon as it is possible to do so. Let us hope that it will not re-



quire a long lapse of time to see, not only the accomplishment of this, but likewise the erection of similar plants at Fernandina and Apalachicola, or even at other points of our State, if such provision should be deemed needful.

The necessity of some reliable means of communication with Mullet Key Quarantine Station and the impracticability of utilizing the ordinary channels of public transportation for this purpose (more particularly during the period of active operations in quarantine) have induced the Board to authorize the purchase of a small steamer for the purpose above named; and accordingly, the State Health Officer and myself, with the counsel and approval of such reliable men of practical knowledge in this line as we were able to consult, purchased, in the name of the State of Florida, a small propeller, comparatively new, which had been owned and used as a yacht by Mrs. Carnegie, for the sum of five thousand dollars.

In searching for and selecting a steamer for the purpose as above named it was deemed a matter of no small consideration to procure at the same time, if possible, a vessel with some sea-going qualities. Your Excellency will, doubtless, recall the fact that I have from my first connection with the office of President of the State Board of Health urged the importance of providing more effectual means, than such as were at our command, to control and suppress as far as possible, the irregular and irresponsible intercommunication between certain portions of the Gulf Coast of Florida and the West India Islands, and more particularly the port of Havana.

The importance of taking action in this matter and our own comparative helplessness to deal with the situation was urged upon the Federal authorities at Washington through every avenue which suggested itself as advisable; but it is only within a few weeks that the first response has been made to our appeals in the form of a suggestion or request from Surgeon-General Hamilton of the Marine Hospital Service to the Secretary of the Treasury that a light draft steamer should be built and commissioned for the purposes and service which I have indicated.

Meanwhile we have been and are compelled to carry this responsibility and danger; and, in addition, have on at least one occasion had our authority defied and our agent personally mal-

treated by one of the vessels engaged in keeping up this undesirable and (I believe) illegal form of intercourse with our coast. Therefore, in the purchase of a steamer the State Board of health had in view the importance, indeed I might say necessity, of providing such a vessel as might possess some sea-going qualities; and, thus, in addition to performing the duties of a tender and supply boat to the quarantine station, that she should be utilized as a patrol boat along the adjacent parts of the coast.

We hope that this object has been measurably secured in the purchase made; and we are assured by those who should be able to claim authority in such matters, that we have obtained the boat at very favorable figures.

#### RECEIPTS AND EXPENDITURES.

Up to the date at which my former annual report was rendered, viz: May, 1890, there remained an unexpended balance of the special appropriation of \$50,000 made at the special session of the Legislature in 1889 for public health purposes, and placed at the disposal of the State Board of Health, the sum of \$38,594.75.

It was, of course, calculated that, in addition to this balance, the sum resulting from the half mill tax ordered and provided for in Section 20 of the Act "to create and establish a State Board of Health," which is directed to be levied annually and set aside as a special fund for public health purposes, would be available; and that the proceeds of this levy for 1889, say \$42,000, was at the service of the Board. With this calculation, and when about to make contracts and commence the erection of the Quarantine and Disinfection Station at Mullet Key, we were informed, upon inquiry at the office of the Comptroller, that the half-mill tax, ordered to be made for public health purposes, had not been included in the levy for 1889. After consultation with your Excellency, and through the public spirited assistance of certain citizens, Dr. Porter effected an arrangement by means of which we have been able to prosecute the undertaking at Mullet Key to a successful conclusion. Later on, I, almost by accident, was made aware that the State Board of Health was about to lose in a similar manner the revenue provided by law for its use for the year 1890. Upon representing the situation to your Excellency, and likewise to Hon.



W. D. Bloxham, who had recently succeeded General Barnes in the Comptroller's office, the difficulty was rectified, so far as it was possible to do so.

There has been, consequently, only the unexpended balance of the appropriation of \$50,000 and the half-mill assessment of 1890, say \$42,000, from which to draw; and, indeed, I do not understand that the latter sum has all been placed to our credit up to this date.

The following statement will present, in a summarized manner, the expenditures, both ordinary and special, which have been made with my approval since my last annual statement was rendered, and for all of which itemized accounts, with proper vouchers, have been filed in duplicate; one being sent to the Comptroller's office and the other kept in the office of the State Board of Health.

## FINANCIAL STATEMENT.

Mileage and per diem of members.....	\$ 282 80
Office rent and furniture.....	322 77
Pay and traveling expenses of Health Officer.....	2,858 20
Clerical help and Inspectors' salaries.....	5,205 40
Telegraphic service.....	70 59
Legal expenses .....	256 85
Stationery, printing, etc.....	693 50
Erecting Quarantine Station, etc.....	24,470 42
Incidentals.....	460 02
	<hr/>
	\$34,620 55

## MEETINGS OF BOARD.

The Board has held three meetings during the past twelve months—the annual meeting in May of 1890; a called meeting in January, 1891, for reconsideration of its rules and regulations, as well as for other important matters in connection with the duties of its work; and last, in February, a called meeting at Mullet Key for the purpose of inspecting and passing upon the work of the contractors for constructing the same. The Hon. W. K. Hyer, I regret to add, in this connection, was unable to be present at this last meeting of the Board, owing to personal reasons beyond his control.

## RECOMMENDATIONS.

In conformity with a provision of the law under which the President of the State Board of Health is required to render this annual report and which defines that he shall include therein "any special observations, recommendations or facts \* \* \* that would be conducive to the health and sanitary condition of the State," I herewith respectfully submit recommendations for certain amendments to the law under which the State Board of Health was organized and is operated:

First, The Board should be vested with corporate powers. This is the case with most other bodies of a similar character, and my experience induces me to believe that its work would be facilitated and its methods improved by said change, without lessening its responsibilities to the Executive of the State.

Second, I am persuaded that there would result an increase of efficiency as well as economy in the execution of the work of the Board if there was a provision by which the President and State Health Officer were constituted an executive committee with plenary powers *ad interim* of the sessions of the Board of Health.

Third, The status of the State Health Officer on the Board is not in keeping with the responsibilities and requirements of the office which he holds and the duties which he is expected to perform. *He should be made a member of the Board*, and thereby given a voice in the proceedings. This is the custom with the large majority of State Boards of Health, and I believe that such a relation between the State Health Officer and the Board would promote efficiency.

Should it appear advisable in view of the fact that such modification of the law would make the Board consist of an even number (four), which might, at some time, prove awkward, I would additionally suggest that the Governor be made a member. As it is he who has to be consulted on many occasions in connection with its work.

I would suggest that the State Health Officer be made Registrar of Vital Statistics for the State, and that the Governor be empowered to appoint, upon application of said registrar, endorsed by the President of the State Board of Health, a *County Health Officer* for each county, or counties, as may appear need-

ful; said officers to be medical men and paid small salaries out of the funds appropriated for public health purposes. Their primary duty should be the collection and forwarding to the office of the State Board, at such intervals as may be designated, reports of the births, deaths and marriages, which occur in their several territories; as well as any other information which might be of value to the Registrar.

These officials might be required, additionally, to attend, professionally, the county jail and hospital; and indigent sick, when practicable for them to do so.

Section 9 of "The Act to create and establish a State Board of Health" empowers the State Health Officer, by and under the direction of the President of the Board of Health, to assume full control of any situation in which there may be recognized the presence of yellow fever, small-pox or cholera. There should be added, "or any other contagious or infectious disease." Diphtheria and leprosy as well, possibly, as other diseases of a like character might require to be dealt with. There should be given to the State Health Officer discretionary power to take similar action, whenever in the interests of the public health and the prevention of disease it may appear advisable. It is true that in Section 12 there is given authority to this officer, and directions in regard to the condemnation and destruction of any material or property that, "in his judgment, shall be likely to produce or cause the spread of any epidemic diseases;" but a greater latitude of discretionary power in this direction would be for the good of the people.

Section 12 also directs that "it shall be the duty of the State Health Officer, between the first of November and the first of May of each and every year, and oftener if deemed necessary by the Board, to visit all the cities and towns or other points where two or more railroads meet, in the State of Florida, which in the judgment of the Board it may be necessary for him to inspect, etc." The literal and thorough execution of this requirement has been found in the first place impracticable, without the utilization of the Assistant State Health Officer, and a large expenditure of money for mileage. It has been impossible for the State Health Officer to accomplish the performance of this requirement in addition to his other duties; and it does not appear to me that the additional expenditure would have been advisable.

The Health Officer has visited and inspected, from time to time, such points in the State as appeared most to require special attention.

I would suggest that such detail be left to the discretion of the State Board, or its accredited representative.

These are the only suggestions which I have to make, and are respectfully offered for your consideration.

Your Excellency will please find hereto appended originals or copies of papers necessary to exhibit in detail the various matters briefly noted in this report.

I would especially ask your attention to the report of State Health Officer Porter, which is ample on all subjects appertaining to the duties of that officer.

I am, Sir, Most respectfully,

R. P. DANIEL, M. D.,  
PRESIDENT STATE BOARD OF HEALTH.

## HEALTH OFFICER'S REPORT.

JACKSONVILLE, FLA., March 29, 1891.

*To the President of the State Board of Health, Jacksonville, Fla.:*

DOCTOR—I herewith hand you, for transmission to the Board of which you are the honorable representative, and also for the information of the public generally, my report of the transactions of my office for the past year.

### GENERAL HEALTH OF THE STATE.

It is certainly a matter of congratulation that no case of Yellow Fever has been reported during the past twelve months; and that I have been called upon to investigate but few suspicious rumors of this disease. No fatal epidemic of any disease has prevailed, and the mortality from all causes was less in the summer months than in many other States; and it can be said that the general health of Florida has been fairly good. The general prevalence of Dengue during the summer and fall, particularly the southern and eastern portions of the peninsula, though fatal in only one instance—case in Leon County—was a source of much uneasiness and anxiety to those whose temperament and predilections tend to panics. This was true of some of the southern counties, for when dengue was first recognized and reported from Tampa, citizens in the counties adjoining became alarmed and were desirous of a prohibitory quarantine against Tampa, and probably would have obtained it under the old order of things of sole vested rights in County Boards of Health, but the Board under its regulations was able to prevent a panic and suspension of trade in the closing up of the avenues of commerce of a thriving city.

Numerous inquiries as to the nature of the disease at Tampa are on file in this office and confirm the above statement.

Dengue was promptly recognized and reported in Tampa, and there was no attempt made to conceal its existence, as the communications hereto appended show.



By promptly answering all queries in regard to the prevailing disorder the alarmists were disarmed and quieted, and the public learning of no fatal sequence soon ceased to pay any particular attention to the matter.

Epidemic Influenza, known as "La Grippe," has had an extensive hold upon the whole State since early fall: Cases have not been confined to any particular age or locality, and have been fatal only from sequences affecting weak organs, and from relapses in convalescence due to imprudent exposure. Medical opinion is not unanimous in reference to the true nature of this disorder, nor does it appear that there is a general disposition to accept the term "La Grippe" as entirely applicable in diagnosis. Some physicians incline to the designation for want of a better term, while others maintain that the disease is the Epidemic Influenza, or Catarrhal Fever, of the older writers.

Diphtheria has occurred in Escambia, Lake and Putnam counties, but under the careful supervision of the County Health authorities the disease was suppressed.

Typhoid Fever has prevailed at several points, due, I am inclined to believe, to lack of observance of sanitary requirements, and in the future should be prevented by individual attention to those hygienic principles which demand, for the preservation of health, pure air, pure water and wholesome food.

Consumption has caused a number of deaths. It is to be regretted that the reports do not all show the nativity of those dying from this disease, in order that it could be authoritatively stated, as is confidently believed, that consumption is not a prevalent disease among native Floridians. It is plain that many hopeless cases are sent into the State merely for the sake of temporary relief, which add largely to the death rate.

The Koch method for the cure of consumption will more likely be successful in a climate, mild and balsamic in character, and it is to be hoped that a fair trial may be given it at St. Augustine and other places. Benefits are too often prevented by delayed coming to Florida; the disease, except in rare instances, being always fatal.

The annexed table states the mortality, and the causes of the same, in the several counties of the State.

## GLANDERS.

The health of live stock has also engaged the attention of the Board, and precautions have been taken to prevent the introduction of contagious diseases from other States. Press reports stating the general prevalence of glanders in several of the counties of Texas was made the basis of inquiry of the State Health Officer of Texas and of the National Commissioner of Agriculture. The latter promptly replied:

An outbreak of glanders is said to exist at Cuero, Texas. Have commissioned a veterinarian to investigate. His report is not received, hence cannot state to what extent the disease prevails.

(Signed)

J. M. RUSK, Secretary.

A circular was at once issued interdicting the importation of cattle into this State from points west of the Mississippi and south of the Arkansas rivers, and all County and City Boards of Health, together with the transportation companies, were notified of this action. Subsequently when Glanders appeared in Georgia its existence was confirmed by the following from the Commissioner of Agriculture of that State:

Yours of the 28th to hand, and contents noted. In reply I will say that the clipping quoted referring to Glanders in lower Georgia is substantially correct. Its prevalence in some counties is alarming.

Restrictions were then placed upon the introduction of stock from that State, and it is believed that these precautions and restrictions have prevented the introduction into this State of this contagious disease, but in neither instance was a prohibitory quarantine instituted before communicating with the proper authorities of the States of Texas and Georgia. Several days after telegraphic and mail request for information had been sent him, the State Health Officer replied in the following telegram:

After careful investigation no Glanders found in Texas. Authority for this statement forwarded by mail. Notify me if this releases the State from further embargo.

(Signed)

R. RUTHERFORD, S. H. O.

But action had already been taken upon the prompt information furnished by the Department of Agriculture of the general Government.

The restrictions on the importation of Texas and Georgia live stock were removed as soon as it appeared that the disease had been controlled and suppressed in those States.

#### INVESTIGATION OF SUSPICIOUS RUMORS.

On April 5, 1890, the President of the State Board of Health received the following from Dr. R. A. Lancaster, President of the Alachua County Board of Health, dated Gainesville, Fla., April 4, 1890:

DEAR DOCTOR:—Yesterday I received a telegram from Dr. Strickland, of Waldo, as follows: "Sudden death here. I think coroner's examination necessary. What is law? Give me light"

I supposed that it was a case of suspected poisoning, or something of the kind, so telegraphed him: "Have justice of the peace hold inquest and if he deems it necessary let him have *post mortem* held." This afternoon about six o'clock I received the enclosed letter from him. I would have telegraphed you but disliked to wire what might cause the public useless excitement, and thought that since the body had already been interred a letter would do, and I could write more particularly. I see that the law requires that I write you and not the Health Officer.

I hope that you or he can go to Waldo and ascertain whether the suspicions are sufficiently strong to make it desirable to quarantine those exposed, to disinfect, etc. If the County Board of Health has any duties in the premises please inform me.

Copy of letter enclosed with above communication:

Dr. Lancaster:

DEAR DOCTOR—It seems as if you did not understand my telegram, and I didn't receive yours in time to do anything before they buried patient yesterday, so I will write you this eve. I was called to see Mrs. Strait between twelve and one o'clock yesterday morning. I got to her bedside about one; found her collapsed, could not arouse her; at six she died with black vomit. I could get no history from her husband. Dr. Cushior had been sending her medicines since Tuesday; he did not see her. All that I could get was that on Sunday she was taken with pain in stomach followed by chill, then fever and vomiting. She came here last Saturday from South Florida. From what station I do not know, and the reason I telegraphed you was because the people near here thought it Yellow Fever and wanted a *post mortem* held. I did not know what to do, so

I sent you a telegram for advice. I could not get enough history of symptoms to form a diagnosis without a *post mortem*. She was buried early yesterday eve.

Yours respectfully,

(Signed)

GEO. W. STRICKLAND.

I immediately left for Waldo and had an interview with the attending physician. The result of the same is given in a report to the President of the State Board of Health, under date of April 12, 1890:

SIR:—In conformity with your request of the 6th inst., that I would proceed to Waldo, Fla., and examine into the circumstances attending the death of Mrs. Strait, which had been reported to you by Dr. R. A. Lancaster, President of the Alachua County Board of Health, I have the honor to inform you that I left on the train next following our interview, namely, at 11:25 A. M. of the same date. I had previously wired Dr. G. W. Strickland, under whose professional care the patient above referred to had been, and he met me at the hotel.

From Dr. Strickland I learned the following history of the case: Mrs. Strait had been at Georgetown, a small settlement in the southern portion of the State—I take it to be near Sanford, as I know of no other settlement of that name (on this Dr. Strickland could give me no more definite information)—where she had been in the service of a family, who, the Doctor informed me, had suffered a good deal from malarial fever during the winter. On Saturday, March 29th, she returned to Waldo and went to her father's home on Santa Fe Lake, four miles from Waldo. On March 30th she was taken with a chill and had fever. Dr. Strickland says he first saw the case on Tuesday morning, the 3d inst., about one o'clock; the patient was then moribund, being cold to her shoulders and above her knees; she complained of pain in her abdomen and winced on pressure being made over left portion of same; abdomen slightly swollen. He administered digitalis and several anemas, and was preparing a "toddy" when, about 6 o'clock, she vomited dark, offensive matter, and died during the vomiting. At no time was the vomiting free or unaccompanied by retching, nor was there a gush of fluid from the mouth without premonitory nausea.

The Doctor further said that about Tuesday the people at the house told him she had commenced to swell and there was some distension of the abdomen when he arrived. He learned that she had taken on Tuesday some powders of rhubarb and soda, but he could not learn of any history of diarrhoea or dysentery or peritonitis. He said that his desire was to have a *post mortem*, and returned to town for that purpose, but failing to get any one to assist him he telegraphed to Dr. Lancaster for instructions; the Doctor



evidently misunderstood him, and before he could explain and get a further reply the patient was buried. The Doctor was unable to say what he considered to be the cause of death, saying he saw the patient too late to form any intelligent diagnosis. Upon his asking me what I considered the patient to have died from, I replied that it was impossible with the brief and incomplete history, as given by him, to form any intelligent opinion, but I certainly did not think the death was caused from any contagious or infectious fever. The patient having been dead four days, I did not consider it advisable to exhume the body as there would have been *post mortem* changes to such an extent as to preclude the possibility of determining the cause of death, except said cause had been from poisoning, of which there was no reasonable suspicion.

The case had made some little talk in the immediate neighborhood, but at the time of my visit, the Doctor informed me, had about died out. No other member of the family had been sick or was sick, and I, therefore, did not consider it advisable or necessary to pursue investigation further.

I think that it can be safely stated that, although the history is incomplete, and in a great measure unsatisfactory, Mrs. Strait did not die of Yellow Fever.

The occurrence of the first cases of Dengue at Tampa, Fla., called for investigation on account of the uneasiness of the general public as to the term "Dengue." The result, in a report to the President of the State Board of Health, showed the groundlessness of any fears in associating the cases or claiming any identity of them with Yellow Fever.

Early in June a letter received from Dr. R. D. Murray, of Key West, gave information of rumors current in that city from a Tampa correspondent, of a suspicious sickness in Tampa. The correspondent, a resident of Ybor City, had written, so it appeared, that the mortality in that Ward of Tampa was very great, and that said sickness was Yellow Fever, the existence of which the Health Officer of the State was cognizant, and concerning which Dr. Wall, of Tampa, was desirous of suppressing all information. I immediately visited Tampa, and the following report, under date of July 14th, to the President of the State Board of Health, explains, as I had anticipated, the absurdity of the rumors referred to:

SIR:—In compliance with your instructions to visit this point and investigate the subject matter of a letter from Dr. R. D. Murray, Surgeon United States Marine Hospital Service, at Key

West, Fla., which stated that a rumor was current in that city of the existence of Yellow Fever at Ybor City, I arrived here last evening, and have spent to day in investigating the subject of Dr. Murray's letter.

I have seen all the doctors in Ybor City, Fourth Ward of Tampa, namely: Drs. Barbarosa, Terga, McChado and Carballo, who positively deny the existence of anything approaching the type of Yellow Fever in that Ward, or, to their knowledge, in the city of Tampa.

The case that Dr. Murray alluded to was a patient of Dr. John A. Jackson. The girl died of Typhoid Fever, as per copy of certificate which is attached to this letter, and was sick for over three weeks. I find that there have been six cases of Typhoid Fever in Ybor City within the last three months, three resulting fatally—one a Spanish male, one an American male, and this girl, who was also an American.

I have carefully gone over the house to house inspection reports (Form No. 13) which are carefully kept, and have diligently inquired of Drs. Wall, Weedon and others, as to the existence of fever of suspicious character that might have been confounded with Yellow Fever; to all queries I have received negative answers.

Therefore I pronounce the rumor as false and the statement as made by the correspondent from Ybor City to the correspondent at Key West, made mention of in Dr. Murray's letter, as also false.

On the 22d of July the city of St. Augustine was thrown into excitement by rumors of a suspicious case of fever having terminated fatally. The patient was a Mr. Edgar L. Warren, a young man lately from Key West. The house where the young man died, together with the inmates and those who had gone to the assistance of a brother of deceased, and the Rev. Mr. Linn, a personal friend, were quarantined, and I learned from persons there that it looked at one time as if a panic and general stampede was threatening. The President of the St. Johns County Board of Health wired the President of the State Board of Health in cipher: "Suspicious case Yellow Fever," which was replied to: "Telegram received. Refer you to Rules and Regulations of the State Board, Section 1, Communicable Diseases, until Health Officer arrives;" and being absent at Key West, I was wired to return at once. The excitement and uneasiness increasing, due to the mysterious actions and intimations of the attending physician; Dr. Daniel, the President of the State



Board, left for St. Augustine, accompanied by Dr. C. J. Burroughs, of Jacksonville, who I had appointed as my deputy in this particular instance, there being no Assistant State Health Officer. The report of the investigation of the case and *post mortem* is appended.

My absence from the office at this time was unfortunate, as from personal knowledge of the patient and of his perfect acclimation, I could have at once disproved, to the satisfaction of every one, even without the corroboration of a *post mortem*, that Edgar L. Warren did not die of Yellow Fever. So confident was I of this fact, that from Key West, without knowledge of said *post mortem*, I wired the President of the County Board of Health to ship the remains home for interment. The suspicion of Yellow Fever seemed to attach itself to the death of the lad because he came from Key West; attention given to the statements of his brother and personal friend, Mr. Linn, of the boy's lifelong residence at Key West and thorough acclimation should have dispelled all such fears, to say nothing of the symptoms and history of the illness, which bore no analogy to a case of Yellow Fever. The history of this case bears out former statements that nervous and panicky people exist everywhere, and a central health authority, upon which local pressure has no effect, is needed to protect the people from injuring themselves and their business.

Leprosy has been known in the United States to a limited extent for many years. Segregated colonies are in Minnesota and Louisiana, and I do not suppose there is a State in the Union where a case of Leprosy cannot be found. That there has been no general spread of the disease is due, I am of the opinion, to its limited contagious properties, and the repulsive appearance of its victims, which would of itself have a tendency to seclude those unfortunates from the general public. They carry upon the countenance the stamp of the curse, which disfigurement would cause them to be shunned and avoided, and in the shunning lies the protection of the great public.

The subject of Leprosy has had the especial attention of sanitarians, the various State Boards of Health and the public press during the past year. Discussion on the extent of the contagious character of the disease was had at the National

Conference of Boards of Health, held in Memphis last May, when separate reports on this subject were made.

The American Public Health Association noticed the question at its recent meeting, and the United States Marine Hospital Service, acting as the National Health Bureau, has issued instructions for strict inspection of shipping from foreign ports, intended to prevent the introduction of lepers into the United States through that channel.

Places and individuals suffer alike from the flings of their neighbors, as they advance in prosperity in the mercantile and commercial world. Florida has been no exception to this rule. Rival companies or individuals, jealous of the general prosperity of the State, have tried various ways, through reflections upon its health, its coast protection system and its cigar industry, to effect that which legitimate competition in trade has failed to accomplish.

Through malice and with the evident desire to injure the cigar industry in Florida, some evil minded individuals circulated rumors through the Northern press of leprosy workmen being employed in the cigar manufactories in this State.

The case of the young student, a leper, who was forcibly taken from his home in New York City to North Brothers Island Hospital, stimulated the sensational reporter and correspondent to increased efforts in this field, and a press dispatch, at Washington, about this time, asserting the existence of cases of Leprosy in Key West, gave an opportunity to the New York papers to work up additional sensational articles of employment of lepers in the cigar factories in Tampa and Key West.

These libelous and false statements regarding a prominent industry of the State threatened if not to injure it permanently, at least to seriously embarrass temporarily the sale of cigars from these places. The State Health Officer of Texas thereupon placed an embargo upon freight and passengers from Key West, and forbid the Mallory Line of steamers en route from New York to Galveston having communication with the city. Quite an excitement over this prohibition, which was considered in the light of an outrage, prevailed at the time of my arrival in Key West. I immediately communicated by wire and mail with Dr.

Rutherford, stating the groundlessness of his fears, with the happy result of liberating the restrictions on the tobacco freight.

The city commissioners of the Key West municipality ordered an investigation through the City Health Officer of these rumors, but beyond a meeting of a few of the medical men of the city, and a general discussion, nothing was accomplished. At that meeting it was proposed to personally visit the manufactories and inspect the workmen therein; also to visit and report upon any individuals thought to be suspicious as to leprosy. A committee was appointed for the purpose, but nothing further was done, as the pay demanded by the committee for performing this service was refused by the city commissioners, neither were the manufacturers willing to contribute to the expense of any investigation.

In 1888 one Burger, claiming to be an expert in leprosy, suddenly appeared in Key West, and reported to the Secretary of the County Board of Health that he had found upwards of one hundred cases. An investigation failed to sustain the truth of his statement, and his meddlesome and impudent intrusion into private families provoked for him a horse-whipping which hastened his departure for Tampa, where, pursuing the same policy, he fell into similar trouble.

Although the State Board of Health of Florida has at no time been officially notified of the existence of leprosy in Key West, yet I do not deny, nor have I any authority for doing so, that cases, isolated in character, have not heretofore prevailed in the place; indeed, it would be strange had not isolated cases occurred, in view of the, until very recently, unrestricted and un-inspected communication between Key West and Havana and Nassau. Physicians of reliability have told me that leprosy has been treated in Key West by them. They never knew, however, of many cases; certainly not more than six or eight at one time, and of late years through death the number has been decreasing. These unfortunates were kept off the public streets, and in no instance was the disease communicated to any other member of the family.

I believe the charge of employment of lepers in cigar factories to be without confirmation, as the peculiar deformity in leprosy and particularly in the fingers and hands, would positively pre-

vent manipulation of tobacco with that dexterity and mechanical skill so necessary in the manufacture of cigars; besides this, and an argument of equal potency, the other employees would not tolerate the presence of a leper among them. They, with the entire community of Key West, have a deadly fear of this disease.

The above are the only investigations that have been demanded during the past year, and only called for mild action, as the reports thereon show.

#### VITAL STATISTICS.

The collection, compilation and publication of the births, marriages and deaths occurring in Florida, have engaged the earnest attention of the office during the past year, but the vital statistics record for the State has not been as full as is desirable; still the reports received have been sufficient as a basis for estimates, hence do not consider the expenditures for this purpose as thrown away.

The tables contained in this report will convey what has been accomplished during the year.

I advise that a bureau of vital statistics for the State Board of Health be provided for by legislative enactment to collect the vital statistics of Florida, and a system for making the record should be defined by statute. An appointee of the Governor in each county, paid from the State Board of Health's special fund, should be provided for. He could collect all matters of *vital* interest and forward the same to this bureau monthly. In this way a reasonably accurate record would be had, and statements based thereon would be reliable.

The difficulty in obtaining accurate statistics was alluded to in the first report of the Board where it was stated that the only way that seemed possible to overcome the difficulty was for the State Board to take the matter in hand and establish a statistical bureau, appointing inspectors, who would ascertain the sanitary condition of the different sections of the country and remind physicians and others of the necessity of keeping a full record of the births, marriages and deaths, and report the same. This suggestion is here renewed. The importance of this portion of the State Board of Health's work is necessarily educational to the masses and cannot be expected to arrive at a stage of perfec-



tion at once. Viewing the experience of other States in this respect I feel that much more has been accomplished with us in the short space of two years than in other States. Many more counties and places made reports of their vital statistics and general sanitary condition during the past year than in 1889, and the reports were better and more intelligently compiled; therefore I feel encouraged to hope that each year will find this division of the work of the Board greatly improved—a continuance in the increase of the number of counties heard from, with more accuracy in detail.

The value of vital statistics is so lucidly portrayed by Dr. Lindsley, of the Tennessee State Board of Health, in an article on vital statistics in the *Bulletin*, and, being as applicable to Florida as Tennessee, may be quoted here:

As the value of facts have long been acknowledged in the less complex branches of human knowledge, so in recent times it has been perceived and acknowledged in those more intricate and complicated topics connected with Government and social conditions. Hence "statistics" has become one of the distinguishing marks of a civilized as contrasted with a barbarous people. \* \* \* \*

The most important of all information is the movement of the great life wave. Is a people going up or is it going down, or is it at a stand-still, as a whole, as compared with neighboring nations? The digest of facts embraced under the term "vital statistics" alone gives an answer to those questions of fundamental concern to rival governments. Again, does one section or division of a great people compare in the movement of life with another? How does Georgia compare with Tennessee, or Massachusetts with North Carolina, or California with New Jersey? Vital statistics must give the reply. Or, more minutely still, how do different countries or divisions of the same State contrast with one another?

#### VACCINATION.

Vaccination has had an impetus and has been quite generally discussed and performed during the past year. Before the school term opened in October the Orange County Board of Health set a laudable example to the other counties in the State in vaccinating all children; and demanding a certificate of protection to small-pox as a pre-requisite for admission to the public schools of that county.

The cases of small-pox at Savannah, on the Charleston and Savannah railroad, at Mobile, and in Texas, awakened the hitherto apathetic authorities to the necessity of looking after the public welfare in this particular, and large orders for vaccine virus from all sections of the State have been, and are still being, filled from this office.

The following, taken from the *Sanitary News* and the *Medical Bulletin*, is decidedly pertinent to this discussion and is given as showing the protective power of vaccination against the mortality from small-pox:

There could scarce be a more striking object lesson, says the British *Medical Journal*, as to the value of vaccination if thoroughly carried out, than is afforded by the example of Holland. Between 1870 and 1873 there were 20,575 deaths from small pox in that country. A stringent law was then enacted making vaccination compulsory, with the result that the small pox mortality has since steadily diminished from year to year. During 1890 only one death from small-pox has so far occurred in the whole of Holland.

If anything in medical practice could be regarded as finally settled by the testimony of overwhelming experience of a century's duration, it would be the inestimable value of vaccination as a prophylactic measure. A century ago epidemics of small-pox raged like a plague. Countless graves, scarred faces and sightless eyes were grim evidences of its power. To-day, thanks to vaccination, epidemics are neither so frequent nor so virulent; the blind orbs and pock-marked face are comparatively rare. Notwithstanding these patent facts, we may still hear the efficacy of vaccination denied. And, to crown the marvel, not only uninstructed or cracked-brain laymen, but medical men of high reputation, misled by fatal subtlety and learned ignorance, put forth an astounding array of figures, assertions and arguments intended to deny the usefulness and overthrow the practice of vaccination. In vain shall Creighton and Crookshank issue forth writings still-born from the press, while every sound, common-sense practitioner, whose mental vision is not too refined to see what lies plainly before him, quietly continues his unpretentious course of vaccination and re-vaccination.

#### APPOINTMENT OF SANITARY INSPECTORS AND OFFICIALS.

In last year's report the attention of the Board was called to the exposed condition of the western coast of the State in the following language: The western coast of the State is more exposed than the eastern because of frequent communication with



Havana, and having, on account of its many inlets and harbors teeming with fish, greater inducements for visits from Cuban smacks carrying on illegal traffic. Thoroughly appreciating the danger from these unguarded points, the local health authorities of such exposed places were placed on their guard, and inspectors were provided for points not protected.

In order to continue this sanitary supervision of all vessels that may make a harbor on the west coast during the quarantine season, and others which ply regularly between the established ports and West Indian ports, and which were unprovided by the County Boards with proper sanitary inspectors, the State Board deemed the continuance of such inspection and inspectors necessary, and therefore appointed Messrs. G. R. Shultz at Punta Rassa, C. A. St. Armand at Sarasota, Morris Cochran at Boca Grande Pass, Fred Leue for the Manatee river, and Odet Grillion at Port Tampa. Shultz, St. Armand and Leue received a compensation of twenty-five dollars per month, Cochran, by reason of his exposed and isolated position, a salary of sixty dollars per month, and Grillion, a permanent employee, at one thousand dollars a year.

These officials discharged their duties faithfully, and were vigilant at all times. The danger to which these inspectors were subjected at times is well described by a letter from Sanitary Inspector Cochran, at Boca Grande Pass, which is given in the correspondence appended to this report.

Immediately upon the receipt of Mr. Cochran's letter, the President of the State Board of Health, His Excellency Governor Fleming, and the Hon. Thomas Palmer, State's Attorney for the Sixth Judicial Circuit, were communicated with. The attention of the Secretary of the Treasury of the United States, and also of Surgeon-General Hamilton, U. S. M. H. S., was invited to the outrage by a foreign vessel, and report of smuggling made by Sanitary Inspector Cochran.

The name of the vessel was subsequently ascertained, but no arrests have been made; indeed, until very lately, it was not possible to do so, as the Board had no means for prosecuting the indignity and outrage.

#### QUARANTINE STATION AT MULLET KEY.

A prominent feature of the work of the Board during the past year, and a source of much gratification, is the erection of the Quarantine Station at Mullet Key at the entrance to Tampa Bay, on the west coast of the State. The importance of quarantine stations on this coast and at Key West, the extreme southern point of the State, and the urgent demand for them was pointed out to the Board at its organization in 1889, and the work would have been immediately undertaken, but it was thought best to defer erecting for that year these universally recognized important adjuncts and protectors of the public health, in view of the uncertainty that attended the possibility of another immediate visitation of Yellow Fever and the consequent demand which would then have to be made upon the especial appropriation of fifty thousand dollars provided at the special session of the Legislature for such an emergency.

Early in 1890 I again brought the matter to the attention of the Board, and the ways and means for the execution of the work was then considered. It was found, however, upon inquiry at the office of the State Comptroller that the half a-mill tax on the assessable property of the State for the fund of the State Board of Health, as provided by statute, and available in 1890, had not been levied for the year 1889, owing to a ruling and construction of the law by that official, and the Board was confronted with the statement of "No funds;" and although only eleven thousand dollars had been expended of the special appropriation of 1889, the balance of that special appropriation was likewise not available for immediate use. However, some public spirited citizens of the southern portion of the State, recognizing the importance of the contemplated and much to be desired stations, came forward and loaned the Board sufficient money to construct one of the stations proposed—that at Mullet Key. These loans the Board secured by warrants from the Comptroller on future appropriations, which, it was specifically understood between the Board and those advancing the money, were not to be presented to the State Treasury for cancellation until notified that funds existed for that purpose, nor were the warrants to be hypothecated. A small rate of interest was agreed to be paid for a few months for the advance.

The contracts for the plant were signed in May by Capt. Thomas White, of Tampa, for the construction of the wharf and approach with superstructure thereon, and by Messrs. Valk & Murdock, of Charleston, for the machinery, and the work was to be finished in ninety working days for the superstructure and twenty-one additional for the machinery. The plant was to consist of a pier-head two hundred feet in length by fifty feet in breadth to which an "L" at one end was to be added. On this pier-head a building was to be erected. Connecting this structure to the shore an approach of fifteen feet in width and the necessary length was also to be constructed. It was provided that the head of the pier, the main wharf, should be in not less than twenty feet of water at low tide, therefore the length of the approach could not at first be definitely contracted for except at a certain sum per foot.

In the "L" portion of the building was to be placed the machinery for disinfection. The specifications for the carpenter and machinist portions of the plant were separately draughted and bids invited for proposals for the work, ample time being given for the bidding. The extracts from the minutes of the Board at the various dates given in the appendix conveys a clear idea of the plan pursued in awarding the contracts.

Owing to the inclemency of the weather the work was frequently interrupted during the summer by squalls and storms, and delays arose from loss of material in transit from Tampa to Mullet Key, and a number of strikes on the part of the workmen who found at times the annoyance and irritation from insects (which were worst last season than in many years) unendurable and they therefore left the work. The whole plant was finally finished as contracted for, and formally accepted by the Board at a special meeting held for that purpose at Mullet Key February 13, 1891.

Besides the buildings mentioned which serve to house the disinfecting machinery, the employes and any cargo which may require disinfection, the station is fitted up with the latest machinery for dry and moist heat disinfecting and sulphur fumigation, and which was constructed by Messrs. Valk & Murdock, of Charleston, S. C. A description of the station is annexed

Mullet Key is located at the entrance to Tampa Bay, at the southwest passage, a channel of the gulf separating it from

Egmont Key upon which the "light" is located. It is a military reservation of the United States. An effort was made by Florida's representatives in Congress to secure a donation of this Key from the General Government to the State Board of Health, but an adverse report was made to the request to donate, by the Engineer Department, and instead of the gift a revocable license to use the Key was issued to the State Board of Health by the War Department.

The piling of which the dock is built is of creosoted pine and from the Fernandina works. The piling, before and after creosoting, was inspected by Dr. Horsey, of Fernandina, whose services the Board secured for this purpose and whose discharge of the duties of the trust in this regard was faithfully executed.

It has been the universal sentiment of not only the Superintendent of construction of the work, Mr. W. T. Haskins, but also of the contractors, workmen and others, that the creosoting was as perfectly done as it was possible for the machinery to do it, and Mr. Burchardi is to be congratulated upon the success of this portion of his contract. One hundred and fifty piles were used in the main dock and one hundred palmetto piles in the construction of the approach from the shore. The latter is well braced and the former is perfectly protected from the chafing of vessels by a series of spring fender piles of four each, chained together and placed along the whole front and side. The northern end of the warehouse has been temporarily divided off into nine rooms, 14x15, with a nine foot hall-way, for the present accommodation of the employes connected with the station. I hope that in the near future the Board will be financially able to erect quarters on the island for the employes, besides a suitable hospital at a distant portion of the island for the possible sick.

Some extra work not mentioned in the contracts, and some alterations in the contracts themselves, was found necessary, which have slightly added to the cost of the entire plant.

The cost of the station complete is in round numbers \$28,000, viz: for the pier head, buildings and approach, \$13,900; for machinery, \$7,000; for transportation of machinery from Port Tampa to Mullet Key, \$175; for supervision of the work by Mr. Haskins, mechanic, nine months, \$825. To this should be added the cost (\$5,000) and the subsequent alterations and repairs to



the steamer "Missoe" (\$886), an adjunct to the station; making the total cost of the construction of the Quarantine Station at Mullet Key, \$27,786.00.

Mr. W. T. Haskins, of Tampa, was appointed an agent of the State Board to supervise the construction of the work, which he has faithfully executed, as the following resolution, taken from the minutes of the Board, held February 13th, 1891, gives ample evidence of:

*Resolved*, That the State Board of Health of Florida and its State Health Officer, desire in this formal manner to convey their thanks to Mr. W. T. Haskins, who during the construction of the Mullet Key Quarantine Station has supervised the same, as an agent of this Board, for the conscientious and faithful manner in which he has discharged the duties of the trust confided to him, and also to express their confidence in his ability and integrity.

Owing to lack of funds, either in the State Treasury or by private proffer, the proposition to build a Station at Key West, similar to the one projected at Mullet Key, was abandoned for the time. It is hoped that this coming summer may find the Board financially able to vigorously prosecute this work and erect this useful adjunct to commerce, at a point where much good can be accomplished, and the benefits will be so apparent.

#### STEAMER MISSEO.

Fully impressed with the imperative necessity of guarding the coast from the illicit visits of Spanish smacks, which find in the numerous harbors and passes of this section of the State a profitable business in fishing and smuggling, the Board from its inception urged upon the general government, through its proper representative, Surgeon-General Hamilton, of the United States Marine Hospital Service, the necessity for a National Coast Patrol.

Repeatedly since then have efforts been made to secure the assistance of the general government in this most important measure which the State Board urged should be undertaken by it, for the reason that it involved the enforcement of the Revenue laws as well as the protection of the health of the entire country, in preventing smuggling and the consequent introduction of infection, but not until this winter has the recommendation taken the shape of a special mention in any of the appropriation bills of

Congress. The failure to obtain relief in this matter of health protection from the general government, and the outrage committed at one of the passes upon an official of the Board in the discharge of his duties, determined the Board that it could no longer delay or defer the question of Coast Patrol, and a steamer of speed, suitably armed, was deemed necessary. This boat kept constantly cruising during the quarantine season would be a menace to all classes of vessels which seek to surreptitiously enter the harbors of the west coast of the State and hold clandestine and illegitimate communication with confederates for the purpose of landing contraband goods liable to infection. The steamer "Missoe," the property of the late T. M. Carnegie, of Dungeness, Cumberland Island, Ga., was offered to the Board at what was considered a remarkably low figure, and after due inspection by the President of the Board and myself, and by a member of the Merrill-Stevens Engineering Company, and other qualified judges of Jacksonville, the boat was bought. The price paid was \$5,000, which included not only the hull and machinery, but also two boats, anchors, chains, sails and awnings and some cabin furniture. Some cleaning and alterations had to be made, which will bring the cost up to \$5,886. The boat was sold for no defect, but solely as being too small for owner's use, and in the opinion of expert steamboat men, and citizens having knowledge of such matters, was bought at a very great bargain. I do not think a more suitable boat could have been built, certainly not for less than fifteen or twenty thousand dollars, the latter, I am told, being the original cost of the "Missoe."

With a change in the style of boilers from an upright to a horizontal Scotch, the boat would be very fast, and the cost of such changes, with the sale of the present upright boiler would be slight. Attention is invited to the correspondence with the National Health authorities on the subject of Coast Patrol.

Recognizing the assistance that the authority of the general government would afford the State in the suppression of illicit intercourse during the quarantine season between foreign infected ports and the State of Florida, an appointment as special inspector for the grand district of Florida for the captain of the State Quarantine and Patrol boat "Missoe," was asked of the Secretary of the Treasury and promptly granted. Hence, when



the quarantine season commences this year the State Board of Health will be better provided than ever before for preventing the introduction of contagious disease from foreign shores.

A Maritime Sanitation Station at Mullet Key, fitted with the improved methods for scientific disinfection, and a patrol boat to guard the avenues of approach, will, it is thought, not only give a sense of security to our own citizens, but renewed confidence to the entire country, in Florida's watchfulness in health matters.

Besides employing this boat for coast sanitary patrol purposes she can be made of efficient service in protecting the fisheries of the State from the piracy practiced by foreign fishermen. A Statute defining this authority will be necessary and should be recommended.

#### RELATIONS WITH OTHER STATE AND MUNICIPAL BOARDS OF HEALTH.

Official relations with neighboring Boards of Health, of the Atlantic and Gulf coast, have generally been of the most friendly character. The confidence in the integrity of each which rises above listening to rumors and acting on the same, without official confirmation, has also been observed, with one exception. The Boards of Health of Savannah, Charleston, Brunswick and Mobile have been courteous, considerate and generous in the treatment of statements and bulletins proceeding from this office. Dr. Rutherford, the Health Officer of Texas, who constitutes practically the whole Board, also rescinded a prohibitory quarantine on Key West cigars, upon telegraphic request from this office, stating that there was no danger of importing or exporting the bacillus of leprosy in cigars, and that the necessity of such prohibition did not exist. But the State Board of Health of Louisiana has not been generous or just in its dealings with this Board. Without a word of warning, without any intimation to this Board of such contemplated action, the following bulletin was issued on July 28, 1890:

Quarantine Proclamation of the Board of Health of the State of Louisiana:

WHEREAS, it has come to the knowledge of the Board of Health of the State of Louisiana, that for the purpose of avoiding quarantine inspection and detention of themselves, and fumigation and disinfection of their clothing and baggage at the

Mississippi River Quarantine Station, passengers from Havana in the Island of Cuba, and from other infected and suspected ports in the West Indies, come from said location to the city of New Orleans, through the seaports of other States, without being subjected to sufficient inspection and detention, or their baggage to proper fumigation and disinfection at said ports;

Now, therefore, by virtue of the powers vested in this Board under Section 4 of Act No. 269 of 1858, of the General Assembly of the State of Louisiana, quarantine is proclaimed against all such persons and their baggage and effects coming into the State of Louisiana. All such persons, together with their baggage and effects, will be arrested on their arrival in the State of Louisiana, and conveyed to the nearest quarantine station, and be there detained for forty days, or less, as the Board may otherwise determine, and their baggage, clothing and other effects subjected to fumigation and disinfection, under the orders of this Board.

IN TESTIMONY WHEREOF I have hereunto affixed my signature as President, under authority of the Board of Health of the State of Louisiana, authenticated with the seal of said Board, at the city of New Orleans, this twenty-eighth day of July, one thousand eight hundred and ninety.

(Signed) S. R. OLLIPHANT, M. D.,  
President Board of Health,  
State of Louisiana.

And as a sequence a lengthy correspondence ensued. (See correspondence.)

The power to make a sweeping denunciation of this State, and injure her commerce, has never been questioned by this Board, on the part of the Louisiana State Board of Health, but the *right* in the sense of equity and fairness is questioned.

The system of intercourse with Cuban ports during the summer and to which the State Board of Health of Louisiana objected so strongly, was successfully operated during '89 when said Board had official knowledge of the State through an agent. In fact this system, inaugurated in 1885 by the Monroe County Board of Health, has proven a success since its inception. The system bore heavily upon certain classes of vessels and classes of passengers and for this reason, and to overcome this objection, a station fitted with appliances by which no vessel need be excluded from trading with Havana and Florida has been constructed.

There was no yellow fever in Florida during the last twelve months. No person passed the surveillance and inspection at

our ports and died of yellow fever in any of the cities of Florida or other States. The State Board of Health of Florida has never claimed *perfection* for any quarantine system. There can be no system operated with perfect success for the exclusion of contagious and infectious disease except by absolute non-intercourse, which the State law does not permit; and, happily, the leading sanitarians of this country do not endorse any such barbarous and semi-civilized methods.

For yellow fever, the Board claims that protection is had by a previous attack, and that clothing contained in a confined atmosphere, together with the receptacle, when properly disinfected and aired, conveys no danger. The Board has hitherto insisted, and will continue to require a surveillance at the Cuban port of departure of all passengers and baggage, and upon this inspection, both of departure and arrival, with disinfection of everything that may be considered *fomites*, the Board lays great stress. The Board discards the statements that "it is a question of chance" whether yellow fever is introduced into Florida or not, and in this it stands in marked contrast with the Louisiana Board of Health. I regret the strained relations which have existed between the Louisiana State Board of Health and this Board during the past year, but from the annexed correspondence it can be plainly seen that the cause and affront was offered and not given; and not to dispute the action of that Board would be inconsistent with what is due to the Health Department of this State. Inter state sanitation demands for a successful and protective operation a reciprocity of confidence in official statements, and until proven that such are unattainable, the integrity of the official bulletin should not be questioned, and it is this carrying out the principle of the golden rule that has always actuated the course of this office in dealing with our neighboring States. Watchful and alert, always. Offensively suspicious, never!

#### OFFICE WORK.

The office work of the Board has steadily increased since the day of its organization. The first year 1,041 letters were received and 1,562 written. During 1890, 1,275 were received and 1,878 written; showing an increase in the correspondence alone of 316 letters.

Besides, eighteen circulars of between seventy-five and two hundred copies have been issued, and the endeavor has been to issue monthly bulletins of Vital Statistics since June. Besides this, much work has been done in correcting reports and explaining methods of rendering same. It has been the aim to have every query courteously answered and as promptly as possible, and if any correspondent has failed to receive a respectful answer to any letter sent, it is desired that the failure to receive or the failure to transmit may not be ascribed to any lack of attention on the part of the office.

Record books, complete in all details, have been prepared for the accurate and convenient keeping of Vital Statistics and general sanitary information. The books prepared for the Board are for condensed and consolidated information of the reports rendered by the counties and cities; those for the counties have been supplied with special reference to the needs of the counties.

It is to be regretted that these books could not be furnished without cost to the county and city health organizations, but the depleted condition of the Board's treasury made this donation impossible, and a charge was made of the actual cost, which was almost nominal (\$3 each, by reason of the large number printed)

These books are nicely gotten up, requiring many ruled columns. Besides the record books, blanks have been prepared and freely distributed, and every effort has been made to render as easy as possible the making of reports. It was appreciated that this work, often a matter of individual interest in sanitation, was performed without pay, or any compensation, and the aim was to have the duty as little a burden as possible. This large amount of work, covering a diversity of subjects, has been performed with one assistant (Mr. Frank Matthews), to whose application, quickness and system it is a pleasure to testify.

#### FINANCES.

The Financial Statement of the Board is appended, but it may be as well to explain in detail some matters connected therewith.

The Board has had but one appropriation of funds in two years. The *special session* of the Legislature which created the



Board appropriated \$50,000 for special work in 1889, and exacted a tax levy for the future support of the Board, of half a mill on the dollar of assessable property of the State. This appropriation of \$50,000 has been the sole source from which the Board could draw during the past two years. The levy of the half mill tax, prescribed by statute, was not levied in 1889, owing to a peculiar construction of the law by the Comptroller, and the failure to do so was not discovered by the Board until too late to have it rectified. The same omission would have occurred in 1890, for it was by the merest chance that the executive officers of the Board discovered that no levy had been proposed, and protested against the construction of the law as made by the Comptroller, as the Board would thereby not only find itself without funds to carry on the routine work of the office but its credit in the matter of contracts made for future work would be impaired. It should be borne in mind that the total expenses of the Board have been defrayed for two years out of a special appropriation made specifically for one year, and that the purchase of much valuable property in plants of different kinds are included in the total expenditures.

The protection from the invasion of disease from without has been increased, not to mention the increased respect earned for the State from neighboring States, in this particular, of which Floridians may be justly proud.

The fund provided by the Legislature for the support of the Health Board (viz.: half mill tax) should defray all expenses for health purposes in the State, unless an emergency arises, as in case of an epidemic. Provision for emergencies like this should be made and authority granted to the Governor to borrow necessary funds, if there should not be a sufficiency unappropriated in the State Treasury. No special tax levy should be required of counties for sanitary inspections and collection of vital statistics, for it is estimated that if the levy provided for the State Board of Health fund is regularly made and collected, there will be ample means for all purposes. The larger cities, where population is dense, having under their charters departments of health, could and should carry on their health work and protection without calling on the State Board for funds, except in emergencies, and it is thought that the public and

independent spirit which is generally found in such communities will prompt their city governments to take laudable pride in caring for the sanitary welfare, as well as the collection of vital statistics; leaving to the State Board to defray all expenses for the general protection of the State.

#### SANITARY IMPROVEMENTS.

It is gratifying to note that much interest has been awakened during the past year in sanitary matters throughout the State. The towns have been alive to the importance of cleanliness and stated inspections of premises have been ordered. Officials have been provided for the purpose of enforcing attention to these matters in places where apathy and indifference formerly existed.

Escambia county, ever watchful of its health and commercial interests, having ample means, has, through its efficient Board of Health, erected during the year a disinfecting plant at the quarantine station at the port of Pensacola, which is fitted with all the modern scientific improvements for moist and dry heat disinfection and sulphur fumigation.

Engle cremation furnaces have been erected in Jacksonville, St. Augustine and Tampa, and grading, paving and draining of streets is in progress at Tampa and Key West. In the latter place two public buildings have been erected, one by the United States Government and one by the county of Monroe; and the third is in course of construction by the municipality. In Tampa the municipality has erected a city hall, and a County court house has been contracted for.

The construction of a cremation furnace, abattoir and the perfection of a system for odorless excavating the cess pools and privy vaults on the Island of Key West is recommended. (See reports annexed.)

It will be a satisfaction to chronicle in the next annual report the completion of all these much-needed sanitary improvements. Green Cove Springs and Palatka are to be commended for their increased efforts towards cleanliness, and thereby rendering these cities attractive.

In July of last year the Clerk of Key West addressed a communication to the State Health officer in relation to sewerage



disposal, which, with the answer, will be found included in the appended correspondence.

As stated in a former report, the question of what system of underground drainage and sewerage, if any, should be adopted for Key West, had been fully discussed in public meetings, through the press, and the sentiment of individual citizens of the community, last May when the first annual report was submitted, was so divided, that at one time it seemed as if an unanimity of opinion of even the Commissioners would not soon be had. It is learned that, although the consideration of a system for underground drainage and sewerage for Key West has been temporarily suspended, yet the idea has not been abandoned.

#### ANNUAL INSPECTIONS.

Section 12 of the Act creating a State Board of Health specifies an annual inspection by the State Health officer of all towns and railroad crossings between November and May of each year.

During the winter of 1889 and '90 I found it impossible to comply with this requirement owing to unavoidable detention on other and more important health matters in the lower portion of the State. The President of the Board pointed out in his report the necessary failure to comply with the law, and gave it as his opinion that, under the most favorable conditions, it would be impossible for the State Health officer, without calling on his Assistant, to literally comply with the specific details of this Section in this respect. When the period for these inspections arrived this year the finances of the State Board did not seem to justify the expense which a literal compliance with the requirements would entail. There was no desire to disregard or evade a full obedience to the law, but having had repeatedly timely warnings from the Treasury Department of the State respecting the scarcity of funds, and aware of the uncertain state of the Board of Health's special fund, the construction of this section, in view of the facts above recited, was submitted to the Governor and the President of the State Board of Health for action thereon. (See correspondence.)

The opinions of both officials, as understood by the State Health Officer, not deeming a literal compliance

with Section 12 as necessary, only the special inspections indicated by the President were made. I agree with the President in the statement made by him last year, that it will be a matter of physical impossibility for one individual to inspect, between the dates named, all the towns and railroad crossings in the State. Nor is it necessary that such inspections should be yearly made. The larger towns where the population is dense might with propriety be yearly inspected, and recommendations made for improving the sanitary condition and removing nuisances objectionable to good health, for "we never see ourselves as others see us;" but even these inspections had better not be specifically a legislative ordinance, for all inspections may be left to the judgment of the Board, the President, or the Health Officer. This report dwells upon this matter because it seems best to explain to the city and town authorities and individual citizens of the same, which have complained of the Health Officer not visiting them, that the failure to do so has not been from want of desire or from apathy or indifference to their importance, but entirely to lack of funds. As already explained in another portion of this report, the failure to levy the tax in 1889, provided for by the Act creating the State Board, has very seriously embarrassed the operations of the Board in consummating many plans which had been devised for improving the health of the State. Had the State Health Officer been possessed of the funds it would have given him more pleasure than he can now well express to have paid visits to every town in the State, and conversed with the health authorities of the same on matters for improving their sanitary condition or giving such advice as might be sought.

The attention of the Board is invited to the inclosed reports on the Convict system of the State, the State Insane Asylum and the sanitary condition of the State Capitol, and the attention of the Legislature should be invited to these matters.

#### LEGISLATION.

President Daniel having requested suggestions as to what might be advised as amendments to the present laws designed to increase the efficiency of the Board for the better health protection of the State, the following is respectfully submitted:

FIRST—The State Board of Health should be incorporated, in order that as a body it may acquire and dispose of property.

SECOND—The State Health Officer, who is the Secretary and Executive Officer of the Board, should be a member of the State Board of Health and an appointee of the Governor. This would increase his efficiency, and is in keeping with the usages of other State Boards of Health.

THIRD—The duties of the State Health Officer should be more clearly defined than in the present law, which deals more with the existence of epidemic disease, and only defines the duties of the State Health Officer at such times, but does not define his authority to enforce cleanliness and sanitary laws in towns for the prevention of disease.

FOURTH—There should be some enactment for the collection of vital statistics; and the State Health Officer should be by law Registrar of Vital Statistics for the State. Authority should be given to the Governor to appoint, upon the recommendation of the State Board of Health, a health officer for each county whose services should be paid for from the funds of the State Board of Health. He should collect the Vital Statistics of the County; the births, marriages and deaths, and forward them monthly to the office of the State Board of Health, and professionally attend, without charge, the county poor and the inmates of the county hospital and county jail.

FIFTH—As this Board has an efficient coast patrol boat, for quarantine and maritime sanitary protection of the coast of Florida, the status of this patrol and the Health Officer in connection therewith, should be clearly defined by law, and as far as possible protect the salt water fish industry of the State from foreign encroachment. The State Health Officer should be empowered to make arrests, not only for violation of the quarantine laws of the State, but also to prevent infringement upon the rights of Florida fishermen and fisheries. Authority of a sheriff should be given the State Health Officer, else it will be impossible to make the quarantine laws effectual.

SIXTH—The efficiency of the Board will be increased by adding the Governor of the State thereto, as an ex-officio member, which would make the Board consist of five members. As it has been the custom of the past two years to consult the Governor on all important matters, it would seem that as a member of the Board the Governor of the State would be a valuable aid to the health interests of the people.

SEVENTH—An enactment by the Legislature making the President and State Health Officer, as Secretary of the Board, an executive committee with plenary powers to act ad interim of the regular meetings of the Board, would also increase the efficiency of the health administration in the State, economizing funds by avoiding the necessity for a meeting of all the members to take cognizance of matters of minor detail.

EIGHTH—Section 12 of the Act creating the State Board of Health prescribes the inspection by the State Health Officer of all cities, towns and railroad crossings in the State between the first of November and the first of May of each year. This is impossible of execution, and hardly necessary in a sanitary or hygienic point of view; and adds a large expense for traveling. This section could be amended to require inspections discretionary in the judgment of the President of the Board and the State Health Officer, or the Board when in session.

Certain modifications of the regulations of the Board may be made without destroying their efficiency, for instance as the Board has the advantage and use of two stations on the West coast, besides the National Station at Dry Tortugas, where improved disinfection is practiced, certain regular lines of steamships could be relieved of the restrictions due to laying over night in the harbor of Havana during the quarantine season, provided a call is made at one of these quarantine stations before communicating with any port or harbor in the State. The fees exacted for the inspection of vessels having no sickness on board, while plying between the ports of the State, should be abolished, as there is no justice in exacting fees for inspections of vessels from healthy places with healthy crews and passengers, for the Board alone has the power to declare inter-place or port quarantines, and prescribe the necessary detention. Protection is afforded through the careful watchfulness given by the Board to all such matters, and the people are timely warned of danger.

Restriction on commerce should be as light as is compatible with health protection. Commerce should be invited and encouraged to our ports, and not driven away by the exaction of exorbitant fees and unnecessary detention.



The policy of the Board should be to protect the public health first; secondly, in so doing not to needlessly hamper or interfere with the commercial and business interests of the State. But each should harmonize, as much as possible, one with the other.

## CONCLUSION.

The increased prosperity enjoyed by the State during the past two years, commencing immediately after the wide spread epidemic and general demoralization of all business, and almost every interest in 1888, has been largely due to the confidence inspired abroad by the creation of a State Board of Health, and the watchful activity displayed by it in all matters pertaining to the general health. The sum annually appropriated to this purpose, through taxation, is probably returned to the State Treasury many times in the investments made by parties residing in other parts of the Union, interested in the State, but who would refrain from placing money therein if the old regime of yearly scares, panics and interference with individual liberty, by inter-place and inter county quarantines existed.

In concluding this report my thanks are tendered to the Board for its courteous consideration of all suggestions from the State Health Officer, and to the President of the Board and Governor of the State for their *always* generous and hearty support of all recommendations for protecting and preserving the public health.

JOSEPH Y. PORTER, M. D.,  
STATE HEALTH OFFICER.

## STATEMENT OF FINANCES.

*The State Board of Health in account with the State Treasurer of Florida.—April, 1889, to April 30, 1891, March and April, 1891, approximated.*

1889. DR.	
To amount appropriated by Legislature of State of Florida, special session, Feb., 1889.	\$50,000.00
To disinfection fees at Port Tampa	201.50
	<hr/> \$50,201.50

CR.	
By disbursements State Board of Health for year ending May 1, 1890.....	\$11,405.25—\$11,405.25
Balance on hand May 1, 1890.....	<hr/> \$38,796.25

1890. DR.	
To balance on hand May 1, 1890, over unexpended balance of appropriation of special session of 1889.....	\$38,796.25
To disinfection fees at Port Tampa.....	69.25
To receipts from sale of record books.....	80.00
	<hr/> \$38,945.50

CR.	
By disbursements, viz.:	
Per diem and mileage expenses of members..	282.80
State Health Officer's traveling expenses.....	608.20
State Health Officer's salary.....	2,250.00
Clerical assistant in office of Board.....	777.50
Attorney's salary and extra legal expenses....	256.85
Inspectors salaries.....	4,427.90
Office rent.....	245.00
Office furniture.....	77.77
General office expenses, postage, etc., including janitor's salary.....	245.17
Printing and stationery.....	573.50
Printing annual report for year 1889.....	120.00
Official telegrams.....	70.59
Packing camp equipage.....	11.15
Expenses Dr. C. J. Burroughs' trip to St. Augustine (case Edgar L. Warren).....	18.70
Steamer hire for coast inspections.....	185.00
Repairs to "Missoe".....	886.01
Maintaining steamer "Missoe".....	1,506.64
Erecting Quarantine Station at Mullet Key ...	21,218.77
Maintaining Quarantine Station to date.....	34.00
Salary Supervisor of Construction, 8 months..	825.00
Total amount (approximately) of disbursements that will be made during March and April, 1891; carrying this statement to beginning of May, 1891.....	<hr/> 3,249.16

\$37,869.71—\$37,869.71

Balance on hand of appropriation of 1889.. \$ 1,075.79

NOTE.—Money to pay for the Missoe has not yet been drawn from the State Treasury, and the purchase is not included in this statement.



DISEASES.	Alachua.	Bradford.	Clay.	Dade.	DeSoto.	Duval.	Escambia.	Franklin.	Hillsborough.	Jefferson.	Lake.	Levy.	Leon.	Manatee.	Marion.	Monroe.	Nassau.	Orange.	Osceola.	Polk.	Putnam.	Santa Rosa.	St. Johns.	Taylor.	Volusia.	Wakulla.	Jacksonville, (city of).	Pensacola, (city of).	Total.	
Abcess, (not stated).....					1									1		1	1	1	1								1		7	
Abcess of Liver .....					1																								2	
Abortion .....				1		1											1												1	
Accident .....					2			2	1		1			2					1		1					2			12	
Angina Pectoris .....																	1											1	2	
Anæmia .....																													2	
Apoplexy .....														1		3							3				5		14	
Asphyxia .....																													2	
Bowels, Congestion of..						1							1	2			1	1				1	1						1	8
Bright's Disease .....									1					1		2					1		1				6		12	
Bronchitis .....									2							8							1				4		15	
Cancer (not stated)....														1		3											1		5	
Cancer (Womb) .....	1													1													1		3	
Cerebral Congestion...I								2		1			1	1	1						4				1				12	
Cerebral Softening....																	1									1	2		4	
Childbirth .....						1								3						1									5	
Cholera Infantum.....		1	1						1	1				1		8	4			1						7	2		27	
Cholera Morbus.....								2											1							1			3	
Colic .....																										1	1		2	
Congestive Chill .....										2				1								1							2	
Consumption .....	7					1	3	3		8				14	2	4	4	5	1		1				4	4	32	23	109	
Convulsions .....	1				1	2	1		1					2		9	9	1			1					13			4	
Croup .....						1	1																					1	4	
Cyanosis .....																1					2								3	
Cystitis .....									2					1													6		12	
Detention .....																														
Diarrhœa .....					1	1	1	2	6	1	1			6		4	2	4			2		1		3	13	7		50	
Diphtheria .....										1																		1	2	
Dropsy .....	1	1				1	1	1						1		2	1						1				5		18	
Drowned .....	3															1		3									1		9	
Enteritis .....	1				1	1		1								6	1									9	1		21	
Epilepsy .....													1			1										1			2	
Empyema .....													1																1	
Fever, (Catarrhal)....	1													1					1								2		5	
Fever, (Dengue) .....													1																	
Fever, (Malarial)....	4				2	6		1	4				2	2	3	14	4	1			9	1	2			23	11		101	
Fever, (Typhoid)....	5					1	2	1	5	1						2		1	1		3	1		1		7	17		48	
Gangrene .....																4													1	
Gastritis .....	1							3																				3	7	
Gastro Enteritis.....												2		1														3	10	
Gunshot wounds .....	1				3	1		1						1							1							2		
Haematocœle .....																									1					
Heart Disease (?).....	4					1	1	1	2				1	1		4	13	2	3		2	3			3	13	3		57	
Hives .....					1																	1					1		3	
Homicide .....																					1	1							2	
Hydrothorax .....																											1		1	
Jaundice .....																			1				2			2			1	
Kidney, (Inflam. of)...									1													1							1	
Laryngitis .....																											3		1	
La Grippe .....														1																
Liver, Congestion of...																	1													
Liver, Cirrhosis of...						1										2	1													
Lungs, Congestion of..	1						1							1				1	1		1	1		1			2		10	
Marasmus .....						1			1							13	1						3				21	1		4
Malarial Cachexia .....									1																				1	
Measles .....																														
Meningitis .....									2	1						7	1	1			1								1	
Myelitis .....	1																										3		1	

DISEASES.	Alachua.	Bradford.	Clay.	Dade.	DeSoto.	Duval.	Esambia.	Franklin.	Hillsborough.	Jefferson.	Lake.	Levy.	Leon.	Manatee.	Marion.	Monroe.	Nassau.	Orange.	Osceola.	Polk.	Putnam.	Santa Rosa.	St. Johns.	Taylor.	Volusia.	Wakulla.	Jacksonville, (city of).	Pensacola, (city of).	Total.
Oedema of Larynx.....																													1
Osteosarcoma.....																	1												1
Paralysis.....							1					1					1					1					3		9
Peritonitis.....		1								1								2	1					2				1	8
Pericarditis.....					1																				1			2	
Pertussis.....																									1				
Pleurisy.....	1																												
Pneumonia.....	8				2	3	3		1						2		1					3		3	1		3		35
Poisoned, (not stated).....	1							1	1								1												4
Poisoned, (opium).....	1																										1		1
Progressive Ataxia.....																													
Puerperal Hemorrhage.....									1								2												3
Premature Birth.....																	1										2		1
Rachitis.....																	1												
Rheumatism.....							1	1																	1		1		4
Rupture of Uterus.....																									1				2
Rupture of Bladder.....																											2		1
Senile Decay.....	5		1	2		1	2		3		2			2	4	8						3			2	1	6	1	43
Septicæmia.....	1															2											4		8
Still Birth.....	5					1						1	1		3	1	2					11		4			7		33
Stricture of Oesophagus.....																						1					1		1
Suicide.....							1																						
Sunstroke.....							1																						
Syphilis.....														2		1													1
Tetanus.....	1														2		7							4				3	21
Tonsillitis.....																	2										1		3
Tumor, (not stated).....																	1										1		3
Uremia.....						1					1																		2
Uterine Hemorrhage.....																											1		1
Cause not given.....	5				3	5	6	2	7		1	1		1		3		6				8	1	3	4		6	2	63
Total.....	61	3	2	6	24	31	23	14	57	6	12	8	10	5	81	137	44	23	6	3	58	3	35	7	25	5	236	112	1037

It is to be regretted that the reports were furnished with such diverse nomenclature, and it is for this reason that no classification has been made; indeed, it was impossible to do so, therefore an alphabetical table has been substituted.

It will be seen from this table that of the preventable diseases Malarial Fever (and under this heading I have included the terms "Continued " "Protracted" and "Pernicious" Fevers) has been the cause of death in Escambia (11), Monroe (14), Duval (29), Hillsborough (4), Alachua (4), Marion (12) and Putnam (9) counties.

Diarrhoea has been the cause of death in the counties of Duval (14), Escambia (9), Marion (6), and Hillsborough (6).

Diphtheria has been the cause of death in the counties of Escambia (1), and Lake (1).

Cholera Infantum has been fatal in Duval (8), Nassau (4), Escambia (7), and Monroe (8) counties.

Consumption has been the cause of death in the counties of Duval (35), Escambia (26), Marion (14), Hillsborough (8), Alachua (7) and Orange (5).

Measles has caused death in Escambia (1).

## INSPECTION OF KEY WEST.

JACKSONVILLE, FLA., March 15, 1891.

*To Dr. R. P. Daniel, President State Board of Health, Jacksonville, Fla.:*

DOCTOR—Complying with your instructions to visit the city of Key West and inspect the sanitary condition thereof, the following is submitted: In the first annual report to the State Board of Health it was noted that extensive improvements were contemplated for Key West, and that a system of sewerage and underground drainage was one of the sanitary possibilities, although the discussion as to the selection of a system seriously threatened to delay early action thereon.

I regret to record that no system for even the area of the island that could be underdrained has as yet been adopted, although it is understood, I am pleased to say, it has not been definitely determined that no partial system will be adopted.

In a communication to the City Commissioners, dated August 12th, 1890, which is appended hereto, I gave it as my opinion that no general and uniform system could be adopted for the whole Island which would meet all sanitary demands. My opinion was formed mainly from that of Col. Waring when on a visit here that, on account of the topography of the Island, two systems for the disposal of household wastes would probably be found necessary for Key West. It seems to me a mistake to abandon entirely the underdrainage of Key West because a system for this purpose is not practicable for the whole, and it is to be hoped that, before it is too late, the City Commissioners may again consider the subject. It is the practice in other places to underdrain portions of cities where it can be safely done, leaving other methods to care for the house wastes of those portions where the first named system cannot be applied.

Various improvements in Key West have been commenced during the past year and are being pushed. Contracts for the grading and paving of many miles of streets have been let, and the laying of comfortable sidewalks, by owners of abutting prop-

erty is required by ordinance. Streets formerly running through low places and stagnant pools of water have been filled in by the clean earth from excavations for grading, and have been so extended as to be a source of convenience to the public and enhance the value of real estate in the immediate neighborhood. An ordinance compelling owners of low lots to fill them to the prescribed street grade is needed and will, I have no doubt, be passed as soon as all the levels and grades have been established.

The County Commissioners have erected a neat and substantial brick court house and contemplate a new jail at an early date.

The City Commissioners have a city hall with a market house central fire station and city prison in course of construction, to be built of brick and iron.

The attention of the municipality has been, at various times, and again recently, called to the necessity for a cremating furnace and a general slaughter house. The cremating furnace is especially demanded to consume an immense amount of garbage and trash, the daily outputs of manufactories and private premises, which accumulates in a surprising manner. At present this debris is used partly for making land in the upper portion of the city and in part is deposited at the dumping ground (in violation of the Rules and Regulations of the State Board of Health), and an attempt is made to destroy it by burning in the open air. This latter method is only partly done and very imperfectly effects cremation, a charring of the upper portion being all that is accomplished. A recent communication from the municipality in reply to an urgent appeal for a better system of garbage disposal and vault cleaning, promises speedy compliance with suggestions in this regard. It is to be hoped that the day is not far distant when dirty premises, foul smelling vaults and unhealthy disposal of garbage will be replaced by neat and tidy private yards, underdrainage (if only in part of the city) and a cremating furnace. A general slaughter house where beef can be inspected on the hoof before butchering would also prove beneficial to the health of the community in preventing the killing for food of sickly or emaciated animals, besides satisfying the general public in regard to the condition of the meat offered for sale.



The commercial importance of Key West demands the erection in the harbor, at an early date, of an inspection and disinfection station of improved pattern, to be used not for infected vessels, for the United States Government has provided the Dry Tortugas Station for that class, but for vessels healthy in passengers and crew, though coming from suspicious ports, to remain a sufficient time to have the foul air removed from the holds and bilges, and to disinfect any baggage or cargo likely to carry infection.

A station of this description would relieve much of the restriction now in force against Havana traffic with Key West, and at the same time, with the surveillance over travel as now exercised, make this traffic perfectly safe to the city, State and country at large.

Very truly yours,

JOSEPH Y. PORTER,  
State Health Officer.

### INSPECTION OF TAMPA.

*To the President of the State Board of Health, Jacksonville, Fla.:*

SIR—Tampa being one of the points mentioned by you for inspection this year, the following is respectively submitted:

More attention and time has been devoted to the western sea coast of the State, and to those places having frequent communication with Cuban ports, than to interior localities, as it was thought that cleanliness and a good sanitary condition would largely enter into the health protection of those places, and through them to the State at large.

It is a pleasure to state that during the past year much has been accomplished in Tampa for the public health. The late Executive of the city was a man of great intelligence and thoroughly appreciative of the benefits of good hygiene and public sanitation. His frequent inspections, his warnings and punishments to offenders against sanitary ordinances had an effect to abate many nuisances, and to correct apathy and indifference to appearances by property owners.

With the exception of the epidemic of Dengue in the summer and of Catarrhal Influenza in the fall, the citizens of Tampa have

enjoyed very good health; and it cannot be said that the two mentioned diseases were confined especially to Tampa or the coast; for the prevalence throughout the State was general. The mortality from all causes at Tampa has been exceedingly low. In the matter of sanitary improvements much has been accomplished. A stone culvert to carry off storm water has been substituted for an unsightly and unhealthy ditch on Jackson street, and the street has been filled in and levelled to a grade. The river front facing the depot of the South Florida railroad has been bulkheaded with piling and the marsh filled in with clean sand. It is understood that an ordinance now compels all property owners to bulkhead and fill in along the whole river front. Much valuable land will in this way be reclaimed besides adding greatly to the appearance of the river front. About two miles of street grading has been made and paving laid, and it is understood that the subject of under-drainage and sewerage will demand the early attention of the Municipal Council. An Engle cremating furnace has been erected, which efficiently and effectually disposes of the garbage, night soil and all trash. A steam cleaning apparatus for the pails is an important attachment of this furnace.

Besides these sanitary improvements, it is briefly noted, the completion of the large and magnificently furnished hotel in West Tampa, and the lately contracted for court house of elegant design and appointments. It will thus be seen that a laudable pride is taken by the citizens of Tampa in the advancement and prosperity of their town, and that improvements of sanitary importance demand equal interest, and a large share of the attention of the citizens generally.

Very truly yours,

JOSEPH Y. PORTER,  
State Health Officer.



## DESCRIPTION OF MULLET KEY QUARANTINE STATION.

The Mullet Key Quarantine Station is situated on the south side of Mullet Key at the south west passage to Tampa Bay, a channel of the Gulf separating it from Egmont Key upon which the "light" is located.

The building is erected on piles about 700 feet from the shore. The piles, 155 in number, were brought from Fernandina, and have had forced into them 16 pounds of creosote to the square foot, making it the best piling ever driven. These immense piles are driven from 17 to 22 feet into an extremely sticky marl bottom, almost unyielding. They stand in 22 feet of water and project 8 feet above the surface of the bay.

The house has a frontage of 207 feet, is built like a letter L, the dimensions being 37x200 feet in the main wing, with an L 37x90 feet, 12 feet 6 inches in height from the floor to rafters. It is well lighted and ventilated, having three large sliding doors opening on the frontage, which is eight feet wide, and numerous windows in other portions of the house. Temporary quarters are prepared in the east end for the officials and their help who will need to abide there. There are nine rooms 14x15 feet, four on one side and five on the other of a 9 foot hallway. The remainder of the main wing is allowed for the manipulation of baggage and ship's furnishing which must undergo fumigation. The L is devoted to the machinery of the station. The house is painted in a deep yellow, trimmed with red. The roof, a most excellent one, is made of cypress shingles,  $4\frac{1}{2}$  inches to the weather, which are protected by two coats of metallic paint. About 135 pounds of paint were necessary for the roof, and the house and approach contain about 200,000 feet of lumber.

The fumigating apparatus consists of a sheet iron furnace shell  $\frac{1}{8}$  inch thick, 10 feet long by 4 feet 6 inches high and 3 feet broad, which is built in wagon-top shape. The furnace is lined with brickwork which supports the grate bars. The two castiron fronts have doors opening into the ash pit, the grate bars and the sulphur pans. These pans, two in number, are each half the length of the furnace and rest on racks above the fires, separating the furnace into two parts. Underneath the pans the smoke of the fire passes out through a pipe connecting with a smoke stack. When the pans are sufficiently heated by the fire below to ignite the sulphur, the fire is drawn out of the grates on to the concrete hearth in front and then raked into the ash pits. Sticks of pure brimstone are then thrown in and it ignites immediately. The blower is then started.

Beside the furnace stands an upright cylinder 30 inches in diameter and  $4\frac{1}{2}$  feet high. From the center of the furnace a 10 inch pipe extends in an arch above, reaching over to the top of the cylinder, where it connects with a pipe which runs down the cylinder to within six inches of the bottom. Another pipe leads out from the cylinder to a Sturtevant horizontal exhaust fan No 4, which in turn is connected with a 12 inch galvanized iron pipe that leads out of the house on the wharf, where it branches and is arranged to accommodate two vessels. Just beyond the fork of the pipe a damper is arranged in each section so that no fumes need be wasted when but one pipe is needed. The ends of the pipe are extended by a 12 inch asbestos hose about 12 feet long, to which a wire gauze basket is attached. By the use of this the sulphurous fumes are distributed evenly and as desired through the hold of the vessel. The exhaust fan is connected by a belt with a seven horse power engine. When set in operation the fan causes a vacuum in the upright cylinder, drawing the sulphur fumes out of the furnace into the cylinder, then through the exhaust fan which blows it into the great pipe leading to the vessels. This is an improvement on the first machine in Charleston, where the fumes were blown through the furnace instead of being drawn out, and it has proved to be a safeguard against fire. The Charleston furnace was experimented on and improved, and this furnace is a copy of the one now used at Charleston. Every part of the machine is simple, easily understood and perfect in its workings. Goods and baggage not treated in the steaming cylinder will be exposed in the ship's hold and subjected to the sulphur fumes.

In the northwest corner of the L stands a large cylinder which is 37 feet long and 8 feet in diameter. The straight portion of this cylinder is 30 feet long. It is made of best boiler steel one-fourth inch thick, firmly riveted together, and the straight portion is first covered with hair felting an inch thick, held in place by wire netting and covered over all with a tight painted canvas. This cylinder is connected with a 35-horse power boiler standing a few feet away, which supplies the dry and moist heat necessary for the disinfecting process. Cast-iron manifolds run along the bottom of the inside of the steaming cylinder. The steam passes from the boiler by means of a two and a half inch pipe into a T which fastens into two manifolds. There are three manifolds on each side of the T, extending to the ends of the cylinder. The steam passes from the pipe into two holes which run the whole length of the manifolds, and from this the steam is discharged into sixty-six coiled iron pipes. Passing through these pipes, which just fit into the cylinder, the steam comes back again into the manifolds and passes

out through two pipes which are screwed into the end of the manifold, and run down to the center of the cylinder, where it escapes through another pipe regulated by a valve underneath the cylinder. Another pipe through which the moist steam escapes runs along the bottom of the cylinder. This pipe is one inch in diameter and perforated by three sixteenth inch holes every four inches and connecting in the center of the cylinder with an inch and a quarter pipe leading to the boiler.

The boiler has two means of water supply, a Park injector and a steam pump, which are connected with either the salt water of the bay or the great fresh water tank which has a capacity of 15,000 gallons. Another tank on the roof holding 5,000 gallons of water is used in washing out the hold of vessels with a solution of muriate of ammonia and bi-chloride of mercury, when necessary, and for other purposes.

The front end of the cylinder is fitted with a cast-iron ring and another corresponding ring is on the moveable head. This head hangs on a swinging crane twelve feet high, so accurately balanced that one person can close the heavy door with ease. A pure rubber gasket is set into a groove in the cast-iron rim about the head and a corresponding projection is on the stationary ring on the end of the cylinder. This front door or head of the cylinder is semi-elliptical in form and is what is called in mechanics, a bumped up head. The rear end of the cylinder projects about five feet and is hemispherical in form.

Extending out in front of the cylinder is an iron track six and a half feet wide securely bolted and braced by double iron braces and hung from the beams overhead. On this track three carriages of five racks each are hung for the handy exposure of clothing. A wire net guard long and wide enough to fasten up over the ends and sides of the rack is used to protect the clothing from contact with the piping or from falling into the cylinder.

As soon as steam is up, the clothes-rack is drawn by ropes hung on pulleys into the cylinder, the two adjustable bars connecting the track outside with the track inside the cylinder removed and the great head swung to on the crane. The cylinder is then closed and fastened by means of thirty-six eye bolts swung on pins working in slots cut in the projecting rims on the open end and moveable head of the cylinder. The rubber gasket forms an air-tight joint. At the moment of closing the thermometers at the front and rear ends register about 156° F. This dry heat is applied for nearly thirty minutes or until it reaches in the neighborhood of 180°. Then the moist heat or vapor is turned on and a pressure of seven pounds of steam applied. When the temperature of the cylinder reaches 235°, the vapor is turned off by closing the main valve. A fall of temperature is facilitated by opening the valve connected with the drain

pipe which allows the hot steam to escape, cooling off the temperature rapidly until it reaches 180° again. There is no danger of burning or scorching anything with the temperature of dry heat maintained which is from 180 to 190°. After the clothes rack has remained a few moments longer all the valves are opened and the steam turned off. When a large quantity of clothing is being steamed, by opening the head a few inches the operator can tell if the goods are dry by the amount of vapor which escapes. As soon as no vapor escapes on opening the head the connecting bars are put up, the ropes attached to the rear of the carriage and it is drawn out on the track.

When drawn out, a linen collar is as stiff and glossy as if it had not been wet. The moist steam permeates everything, saturating it with water, but the drying process is so thorough that not a sign of the action of water remains. Everything which is steamed comes out in perfect order, and the process occupies about one hour and thirty minutes.

The company guarantees that this process is perfectly harmless and will not injure the most delicate fabrics or colors. All kinds of leather, furs and rubber goods are excluded from the cylinder, as they cannot stand the heat.

## CORRESPONDENCE.

### DENGUE AT TAMPA 1890.

PORT TAMPA, FLA., July 19, 1890.

To Dr. R. P. Daniel, President State Board of Health, Jacksonville, Fla.:

DOCTOR—You can firmly contradict any rumors about yellow fever here, for there is none. I am still of my original opinion, expressed in a letter to you yesterday, that the epidemic which has prevailed has been mild Dengue. It has not been clearly marked, but yet the pain in head, back of neck, small of back and eye-balls, lasting with a slight fever, not over 103 degrees, of any of the cases, with a rash in a goodly per cent. of cases, has confirmed me in my diagnosis. It has attacked indiscriminately old, young, black, white, natives and Cubans,—those who had yellow fever in 1887 and other years, as well as newcomers. From what I can learn it has been prevailing since the last days of June, and it is now about its subsidence. Dr. Weedon, on being questioned about it, says it is a malarial fever, and denies any epidemic tendency, and further says that if epidemic it is only malarial fever, and that epidemics of malarial fever can prevail. As supporting his theory he gives the evidence of quinine in three 10 grain doses as controlling the fever in twenty-four to thirty-six hours. Dr. Jackson thinks it is mild Dengue. Dr. Wall thinks it is la-grippe, and says his patients all complain of great oppression about the chest, and in one case he had circumscribed pneumonia with rusty sputum. He quotes freely from articles in the London *Lancet* in support of his views. I have had one case at the port; gave a cathartic at night, and following morning gave five grains of quinine; followed the following day with mild aperient.

The patients all complain of prodromic symptoms of malaise and langour for two or three days. Then are attacked with a chill or chilliness and the pains complained of as above noted. These are very severe and the aching in joints and limbs continues some days after the fever leaves. There is no nausea or vomiting. No irritable stomach. Dr. Weedon has examined the urine in a number of cases with negative results as to albumen. Ybor City has had, I judge, more cases than Tampa proper. The settlement is partly in a swamp and the *bacillus malaria* plays an important factor in complicating all diseases occurring there. There has been no deaths from this disease.



I did not wire because I did not think it sufficiently important, particularly as I was not aware that inquiries had been made of you by the County Health authorities. There is really no absolute necessity for my remaining here in this neighborhood,—still as long as people will talk and write and we can't control them, it may be a matter of "public policy" for me to stay here quietly for a few days longer. Mr. Henderson was very glad to see me here, and the physicians have been very courteous. Dr. Wall took me very promptly to see cases that he had on hand.

Yours truly,  
(Signed) JOSEPH Y. PORTER,  
State Health Officer.

PORT TAMPA, July 30, 1890.

To Dr. R. P. Daniel President State Board of Health, Jacksonville, Fla.:

DEAR DOCTOR—The epidemic of dengue which has been prevailing at this place for the past month still continues with little if any disposition to "let up." The cases are mild in character, and although from rough estimates furnished me by the physicians, I judge that there have been between three and four hundred cases I fail to find any death recorded from dengue. I personally examined to day the death certificates for the month, as kept in the city Sextons office, and find up to date that there has been sixteen deaths from all causes, and but one from what I should be inclined to diagnose as typhoid fever. The certificate in question was signed by a Cuban physician, the deceased being also a Cuban, of twenty-one years, and cause of death given as "Pernicious Fever." I have asked the County Board of Health to investigate this case, which will be done this P. M. The mistake is often made by Cuban physicians, speaking but sparingly of English in confounding pernicious and typhoid fevers in their terms. This epidemic of Dengue manifests a disposition to spread along the line of railroads; for I hear of cases at Seffner, twelve miles distant from here, and also at Lakeland, thirty miles up the road.

Yours respectfully,  
(Signed) JOSEPH Y. PORTER,  
State Health Officer.

# MEMORANDA OF CASE OF EDGAR L. WARREN AT ST. AUGUSTINE.

Memoranda case of Edgar L. Warren, Anglo-American: Aet. 17; native of Key West; never away from Keys until a few days since. Arrived in St. Augustine Thursday, July 17th, direct from home. Quite well, except that has had some old trouble with testes; don't know nature of. Also has had formerly more than one sudden and grave illness, apparently of a bilious nature, and from which he would promptly recover. Bathed in swimming pool at Casino on Friday; remained in half an hour or more, and exercised vigorously with rings. Complained of pain in testicles soon after and had a chill. Suffered more or less intensely with pain in his testicles from this time. Stomach was very irritable and hard to keep anything on it. Restless and could not sleep. No better Saturday. Had purgation from some medicine. Rested better Saturday night. Same on Sunday. During Sunday afternoon appeared worse rather than better and Dr. Alba was called. Pulse found 125 or 130, temperature 106°, tongue slightly coated, and very dry. Skin dry. Left pupil very dilated; right less so. Brain not very clear. He was put upon doses of calomel, and also antipyrine in ten grain doses. There was no material "light" up to the symptoms. Temperature dropped to 104° and pulse to 118 during Monday afternoon under the use of antifebrine. Bowels seemed to respond to calomel and urine appeared free enough. No examination was made of it. Brain seemed less obtuse during Monday, but stomach scarcely less irritable. Monday night seemed to promise a better night, but was taken with rigor about late bed time; it lasted but a few moments, when reacted and complained of great heat; later got up on commode and had a spasm while up. This passed off. Half an hour or longer after had a second and died quietly a few minutes after, about 2:30 A. M. Tuesday morning.

ST. AUGUSTINE, FLA., July 23, 1890.

*Post mortem* made on the body of Edgar Warren, Aet. 17. Present: Drs. W. F. Shine, E. M. Alba, J. K. Rainey, C. J. Burroughs and R. P. Daniel. *Post mortem* made by Drs. Shine and Burroughs. Notes kept by Dr. Daniel.

Thirty three hours after death. Body was embalmed seven hours after death.

Appearance of cadaver: No observable emaciation; no rigor-mortis; complexion swarthy and not clear rather than yellow. Cuticle on hips and thighs and posterior portions of trunk peels easily on handling. Superficial blood vessels on portions of body distended and dark.

Eyes: Pupils dilated; sclerotics clear. Testicles much enlarged and indurated. Incision made from upper extremity of

sternum to pubes and transversely four inches above umbilicus. Sternum with costal cartilages was turned back. Both lungs highly congested and dark. Heart flabby; walls abnormally thin. Right ventricle containing more or less coagula. Left empty.

Abdomen not enlarged or tympanitic; when opened, contained quite an unexpected amount of fluid, as did also pleural cavities. Omentum and intestines did not look congested. Liver externally rather pale with mottled or ecchymosed spots, and somewhat enlarged. Section of right lobe a very dark red with abundant bloody oozing and breaking down easily. Left lobe more approaching to normal appearance, but the same in less degree. Gall bladder distended with greenish black bile. Spleen externally pale, somewhat enlarged; on section very dark, engorged with fluid blood and substance very pliable.

Stomach externally irregularly pale and high colored. When opened, contained some five or six ounces of dark green fluid with tinge of bile and some little curd of milk. No appearance of blood, and mucous membrane of organ perfectly intact; of a rather pale and yellowish hue, with congested blood vessels scattered over.

Small intestines moderately empty; no particularly high coloring; containing some greenish, semi-fluid fecal matter.

Bladder empty. Kidneys about normal size, unnaturally dark, particularly in tubular structure.

(Signed) W. F. SHINE, M. D., President St. Johns County Board of Health.

E. M. ALBA, Attending Physician.

J. K. RAINEY, Consulting Physician.

C. J. BURROUGHS, M. D., Health Officer, Jacksonville.

R. P. DANIEL, M. D., President State Board Health.

#### EXTRACTS FROM THE MINUTES OF THE BOARD RELATING TO THE BIDS FOR THE MULLET KEY QUARANTINE STATION CONSTRUCTION.

JACKSONVILLE, FLA., April 3, 1890.

\* \* The Secretary then informed the Board that upon a full explanation to the Governor and Comptroller of the necessities of the State Board and the embarrassment it found itself in by want of sufficient funds to complete certain quarantine work deemed essential for the preservation of the health of the public of the State; it was decided and agreed upon that certain financial arrangements suggested by the State Board of Health would be approved of by the Governor and Comptroller and the war-

rants for the amounts required would be issued under certain conditions, which were then explained. The Secretary further stated that upon his return to the office of the State Board, and after consultation with the President, he, in accordance with an understanding that he had with the other members of the Board after the adjournment of the meeting of March 8th, at Tampa, wrote letters to the several bidders of the iron and wood work for the proposed quarantine station at Mullet Key, Tampa, Fla., saying, "it has been decided to ask from the various bidders new bids or proposals for this work." "It is thought the bidders can better do themselves justice, and the Board also, in the preparation of new bids, therefore you are requested to submit a new bid for this work." To this notification he had received entirely new bids for the iron work and some new bids for the wood work.

The proposals scheduled were then submitted as read, as follows:

#### Iron Work:

Merrill-Stevens Engineering Co., Jacksonville, Fla.—

Bid February 28th . . . . .	\$ 9,865 00
Bid March 9th . . . . .	9,715 00

H. Dudley Coleman & Co., New Orleans—

Bid February 17th (on own specifications)	3,000 00
Bid March 29 (on Board's specifications)	7,000 00

Valk & Murdock Iron Works, Charleston, S. C.—

Bid January 16th . . . . .	6,450 00
Bid February 19th . . . . .	5,900 00
Bid March 21st . . . . .	6,300 00

#### Wood Work:

W. H. Crouch & Bro., Charleston, S. C.—

Wharf . . . . .	7,500 00
Buildings on same . . . . .	5,000 00
Approach per lineal foot . . . . .	4 50

S. G. Harvey, Tampa, Fla.—

Wharf and buildings on same . . . . .	11,650 00
Approach per lineal foot . . . . .	3 75

W. H. Kendrick, Tampa, Fla.—

1st Bid—Wharf and buildings . . . . .	9,700 00
Approach per lineal foot . . . . .	4 00
2d Bid—Wharf and buildings on same . . . . .	11,000 00
Approach per lineal foot . . . . .	4 00



Joseph Marzyck, Jacksonville, Fla.—

1st Bid—Wharf and buildings on same . . . . .	11,500 00
Approach per lineal foot . . . . .	4 00
2d Bid—Wharf and buildings on same . . . . .	10,965 00
3d Bid—Wharf and buildings on same . . . . .	10,960 00
Approach per lineal foot . . . . .	4 00

A. L. Shaw, Tampa, Fla.—

Wharf and buildings on same . . . . .	9,960 00
Approach per lineal foot . . . . .	4 00

W. A. Miller, Sanford, Fla.—

Wharf . . . . .	5,607 00
Buildings . . . . .	3,194 00
Approach per lineal foot . . . . .	3 00

Thomas White, Tampa, Fla.—

Wharf and buildings . . . . .	10,492 00
Approach per lineal foot . . . . .	3 88

John Saunders, Jacksonville, Fla.—

Wharf and buildings . . . . .	10,600 00
Approach per lineal foot . . . . .	3 90

\* \* \* The consideration of the proposals and bids was then resumed and after due examination the bid of Valk & Murdock Iron Works, of Charleston, S. C., for the machinery of the disinfecting plant for \$6,300.00 was accepted and the Secretary was requested to notify the firm, in accordance with the following resolution offered by Mr. Hyer:

WHEREAS, The bid of Messrs. Valk, Murdock & Co., of Charleston, for the construction and erection at Mullet Key Tampa Bay, of the disinfecting and fumigating plant, in accordance with the plans and specifications submitted, is lower than the bid of any and all others submitting estimates for same work; be it

*Resolved*, That the bid of Messrs. Valk, Murdock & Co., be accepted, and that the President of the Board is hereby authorized and directed to enter into a contract with Messrs. Valk, Murdock & Co., of Charleston, for the construction and creation at Mullet Key of the fumigating and disinfecting plant, in accordance with the plans and specifications for the sum stated in the tender dated March 21, 1890, viz: \$6,300.00, and in addition to the cost of transportation of the machinery from Port Tampa to Mullet Key; and be it further

*Resolved*, That the President shall require Messrs. Valk, Murdock & Co. to enter into good and sufficient security for the faithful performance of the contract.

JACKSONVILLE, SATURDAY, April 5, 1890.

\* \* \* The following resolution was offered by Mr. Henderson and adopted:

WHEREAS, W. A. Miller, of Sanford, having appeared before this Board in accordance with a notification from the Secretary, under instructions from this Board, that his was the lowest bid for the construction of wharf, approach thereto, and necessary buildings thereon, at the proposed quarantine station at Mullet Key, entrance to Tampa Bay, Fla., and

WHEREAS, Mr. Miller asks to withdraw his bid; be it

*Resolved*, That the President be requested and empowered to enter into contract with the next lowest bidder for the work, in such legal manner as will protect the interests of the Board and the public and expedite the work.

JACKSONVILLE, FLA., May 6, 1890.

\* \* \* The President stated for the information of the Board and for record that in accordance with the resolution adopted at a meeting held April 5, 1890, that he had endeavored to enter into contract with Mr. A. L. Shaw, of Tampa, Fla., for the erection of the wharf and buildings thereon, at the proposed Mullet Key Quarantine Station, he being the next lowest bidder, Mr. Miller withdrawing. On communicating with Mr. Shaw it was found he did not wish the bid submitted March the 7th as holding good for the meeting of April 3, '90, therefore the next lowest bidder, Mr. Thomas White of Tampa, was communicated with and subsequently a contract entered into with him for \$10,492.00 and \$3.88 for approach, and a satisfactory bond for \$25,000.00 was offered by Mr. White and accepted. The President also verbally stated that a contract had been completed with the Valk & Murdock Iron Works of Charleston, S. C., for the construction of a disinfecting plant for moist and dry heat, also fumigating apparatus at a proposed cost of \$6,300.00. The same to be constructed and erected at the Mullet Key Station to the satisfaction of the Board of Health.

RELATING TO THE OUTRAGE ON INSPECTOR COCHRAN AT  
BOCA GRANDE PASS, NOVEMBER 7, 1890, AND CORRE-  
SPONDENCE IN RELATION TO THE COAST SANITARY  
PATROL.

PUNTA GORDA, FLA., November 22, 1890.

Dr. J. Y. Porter:

DEAR SIR—On the 7th inst. I boarded a Spanish schooner, and demanded of the captain to have a look at his papers; I was answered by an order to leave the boat at once; I replied that it was my duty to see that vessels direct from Cuban and other Southern ports had no communication with anyone in this harbor; he said he was from Key West. I asked again from the captain to see his papers; he then exhibited them and they were in Spanish, and he hailed from Havana; I to'd him so, and they at once set upon me and threw me overboard, and then cut my boat loose and sailed on into the harbor, leaving me to find my boat as best I could, which I fortunately found and got back to the island. This was about 8 P. M. The next day I found them at anchor off LaCosta Key and saw boats coming and going from the vessel to the land.

The vessel had a Spanish name which I could not make out; but I will know her and can give you, if needed, a detailed description of her. He threatened me and also said he would return when he pleased. I verily believe they landed fifty demi-johns of rum, from information I have since received from fishermen.

Please instruct me what to do, as the vessels from Cuba invariably threaten me or refuse to let me board them. Can you put a man with me so I can use my sloop? She is five ton and fast and I can overhaul any of them, and if you order I will board them with my Winchester, and use it if actually necessary. Please send me instructions at once.

I would suggest to the United States authorities to put an armed patrol under some sharp man, and it will certainly meet with several successful captures at this point, and break up this smuggling that is carried on with impunity.

When will my duty here cease? Please advise.

Yours truly,

(Signed)

MORRIS COCHRAN.

P. S.—As they threatened to return, would it not be well to be ready for them at once.

Governor Francis P. Fleming, Tallahassee, Fla.:

SIR—I desire to invite your serious attention to the following resolution which was passed by the State Board of Health, at its last session in this city, viz:

Recognizing the necessity for a strict watchfulness over our coast of Florida during our summer season, now so near at hand, to prevent a violation of the rules and regulations establishing quarantine, and realizing our inability, for want of proper means, to have such a vigilant and effective coast patrol as seems necessary:

*Resolved*, That the President of this Board, through the Governor of the State, confer with the authorities at Washington, either with the Secretary of the Treasury, or with the Secretary of the Navy, or with both, for the purpose of securing such co-operation and assistance as may be in their power to render.

I would suggest that a boat (propellor) seventy-five feet long and about four feet draught of water, to carry about five men, would be all that would be required in the waters of this coast.

\* \* \* I would desire to impress upon you the importance of this coast patrol and, as the control of the high seas within three leagues of the shore is vested by Congress in the General Government, it is but natural to expect that provision against smuggling on this coast from Cuba, with its attendant dangers of introduction of yellow fever in the same way, will be made by the General Government, under you, through the Treasury Department.

Please let me hear from you.

Very respectfully,

(Signed)

JOSEPH Y. PORTER,  
State Health Officer.

JACKSONVILLE, FLA., April 13, 1889.

To His Excellency, Francis P. Fleming, Governor of the State of Florida, Tallahassee, Fla.:

MY DEAR SIR—I enclose for your consideration a copy of a resolution passed by the State Board of Health lately in session, and would earnestly request that you forward it to the proper authorities in Washington, at the same time giving your earnest and cordial endorsement of the measure proposed in said resolution.

Unless the General Government comes to the aid of the State Board of Health of Florida, in patrolling the vast sea coast of the State, I do not see how it is possible, with the limited appropriation at our command, for the State Board to successfully cope with the large navy of smugglers that take refuge in the harbors and inlets, particularly along the western shore of the State.

Very truly yours,

(Signed)

R. P. DANIEL, M. D.,  
President State Board of Health of Florida.



JACKSONVILLE, FLA., May 17, 1889.

*Governor Francis P. Fleming, Tallahassee, Fla.*

SIR—\* \* \* I am not sufficiently familiar with this portion of the coast and character of the traffic that needs overlooking to specify the best requirements for the coast guard duty around Florida. But my own judgment in regard to this matter, fortified by that of many intelligent citizens, who are familiar with the situation, and of the State Health Officer, in addition to the larger steamer for general observation along the coast, there is needed a boat drawing not more than three or four feet, and requiring a very small crew to handle, which could always search the small waters and refuges that are available to smugglers, and would thus prove very much more impressive and efficient.

Yours very truly,

(Signed)

R. P. DANIEL,  
President State Board of Health.

WASHINGTON, D. C., May 10, 1889.

*Dr. R. P. Daniel, President State Board of Health, Jacksonville, Fla.:*

DEAR SIR—In regard to properly supplying a system of coast guard to protect against the importation of diseases, I have to say that the Secretary of the Treasury has ordered a light draught steamer, the revenue cutter "McLane," which will take the place of the "Crawford," and will be enabled to run into such harbors and shoal waters as are infected by smugglers, and has had special instructions given for the protection against this illegal traffic.

Yours truly,

(Signed)

JOHN B. HAMILTON,  
Supervising Surgeon-General, M. H. S.

JACKSONVILLE, FLA., July 3, 1889.

*To His Excellency, Francis P. Fleming, Governor, Tallahassee, Fla.:*

DEAR SIR—I have already informed your Excellency that the State Board is unable, at least for the present, to cope with this question. We have appealed through you, and otherwise, to the Federal authorities for help in this matter, claiming that it is of national moment as well as of State interest, but thus far, although we have entered upon the most dangerous and epidemic season of the year, there has really nothing been done, so far as I am informed, that lessens the danger from this source. It is true that the "McLane," a steamer of light draught, has been substituted for the revenue cutter "Crawford," which

formerly patrolled this part of the coast; but the former even draws too much water to be effective in controlling the class of smugglers to which reference is made by Dr. Porter; and when we consider the length and character of the sea coast reaching from Cape Florida to Ceder Keys on the Gulf, you will at once recognize the utter inadequacy of such a service to the requirements.

Yours most truly,

(Signed)

R. P. DANIEL,  
President State Board of Health.

JACKSONVILLE, FLA., Jan. 9, 1891.

*Hon. John B. Hamilton, Surgeon-General, U. S. M. H. Service, Washington, D. C.:*

DEAR SIR—Will you be kind enough to inform me at what time you expect to have the Quarantine Station at Tortugas thoroughly equipped with disinfecting apparatus and steam tug with fumigating appliances for sea-going purposes, which appurtenances I have been led to understand would be furnished that station, and that it would be thoroughly equipped in all respects for scientific work?

Please let me know when you expect to have the station completed.

Thanking you in advance for this kindness, I am,

Very truly yours,

JOSEPH Y. PORTER,  
State Health Officer of Florida.

WASHINGTON, March 17, 1891.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.:*

SIR—In reply to your inquiry in regard to the Quarantine Station, at Tortugas, you are informed that plans are now being perfected for the erection of a wharf, which it is hoped will be speedily accomplished; also that a steam vessel will be provided for this station during the coming season; and that a disinfecting apparatus, appropriation for which is already made, will be placed on the wharf.

Respectfully yours,

JOHN B. HAMILTON,  
Supervising Surgeon-General, M. H. S.

CORRESPONDENCE WITH THE LOUISIANA STATE BOARD  
OF HEALTH.

JACKSONVILLE, FLA., July 28, 1890.

*Dr. S. R. Olliphant, President Louisiana State Board of Health,  
New Orleans, La.:*

DEAR SIR—I am informed that your board, at a meeting on the 10th inst., passed a resolution, forbidding passengers from Cuba, via Florida ports, to enter New Orleans, without a detention of five days at your Quarantine Station, at Rigolets. May I ask if such information is correct? And may I also ask if similar restrictions are placed upon passengers from Cuba, via New York, or any other State in the Union, except Florida, and if so how you propose to enforce such restrictions?

I earnestly invite your attention to the fact that passengers from Cuba for Florida are required to be acclimated, that is to say, had Yellow Fever, or have lived sufficiently long in cities or towns annually subjected to this disease as to warrant them as being known as acclimated and perfectly safe so far as this disease is concerned.

The baggage of such persons, if destined to a point beyond 38° 54' N. L. (Washington, D. C.) is not subjected to disinfection at any of the ports in Florida. For points below this latitude they are subjected to sulphur fumigation at point of arrival in this State. The State Board of Health is now constructing a disinfecting station (similar to the one operated by your board) on Mullet Key, entrance to Tampa Bay, and hope soon to have it completed, when baggage will be subjected to moist and dry heat disinfection.

Reverting to the subject of certificates of acclimation, I beg to call your attention to the proceedings of the Quarantine Conference held in Montgomery, Ala., last year, and to page 23 of the same, in Section 11 of which will be found "and to such certificates full credence should be given by all health authorities." Although this section applies to Yellow Fever in this country, I do not see that the same credence should not be given to the representative of the National and State Government at Havana.

A member of your Board, and President of the same, was a member of this Quarantine Conference at Montgomery, and assented to the proceedings, therefore I fail to understand why a certificate issued by the State Board of Health of Florida will not be given full credence by the State Board of Health of Louisiana, and I earnestly protest, as State Health Officer of this State, against the assumption of the State Board of Health of Louisiana that passengers admitted into Florida are not safe, and threaten the health of this and neighboring States.

I would also remind you of the fact that the system under which communication is maintained with Cuba during the summer months—namely, the certificate system of acclimation,—meets with the approval of the Sanitary Medical Officer of the United States at Washington.

I beg that you will give this matter your earnest and careful attention, and will not arbitrarily condemn a system that carries with it the advanced principles of science as well as common sense.

Very truly yours,

(Signed)

JOSEPH Y. PORTER,  
State Health Officer.

NEW ORLEANS, LA., July 31, 1890.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.:*

DEAR SIR: Your communication of the 28th inst. to hand. Enclosed you will find copy of the Proclamation issued by the Board of Health of Louisiana, which sufficiently answers your first question.

This action has been taken after mature consideration. This Board, from sad experience, has learned that admitting passengers by the certificate system from infected ports is hazardous in the extreme. It has been the cause in past years of introducing Yellow Fever into our city.

No ship from an infected port is allowed into this State, except through the Mississippi River Quarantine Station, where it is subjected to Maritime Sanitation and five days' detention. All passengers are detained with the vessel.

According to your custom and certificate system, our Quarantine Officer could take the passenger's personal statement, or, if the officer so desired, he could require the applicant to swear to the truth of the statement and then allow them to proceed into the city without detention. With our ideas of quarantine such a course could not be entertained for a moment. If we disapprove such course with our own shipping, why should we encourage it in others?

While we are inclined to give due credence to all official health reports, we can but see the weak points in this certificate system, and see how easily your authorized agent in Havana could be imposed upon.

Allow me to assure you that the action of the Louisiana Board of Health was taken, not from lack of confidence in the representative of the Florida Board of Health, or of the National Government, but from a lack of confidence in the system, a lack of confidence in mankind when self-interest intervenes, and a lack of confidence in the means of getting information.



We deem it criminal in the highest degree to subject a community, and through it a large section of our country, to the risk of introduction and dissemination of a scourge like Yellow Fever, on the personal statement, even if sworn to, of irresponsible persons. When mankind has learned to sacrifice self-interest for the public good, when no man can be found who would conceal any facts to serve his own personal ends, then we might afford to take such risks, but not till then.

We have not deemed it necessary to place restrictions on passengers from Cuba via New York, simply because the time from Cuba to New Orleans via New York is at least seven days, whereas that via Florida ports is less than three days, and the latter time is not sufficient to cover the period of Yellow Fever incubation.

Our methods of enforcing our regulations have not been fully matured, but for the present we will keep supervision over every incoming train and take every Havana passenger to our Quarantine Station.

We regret that your State Board cannot see the danger that we conceive to be in the system, and trust that you will no longer think that we are arbitrarily condemning a system based on science and common sense.

Very respectfully,  
(Signed) S. R. OLLIPHANT, M. D.,  
President Board of Health State of Louisiana.

JACKSONVILLE, FLA., August 4, 1890.

*Dr. S. R. Olliphant, President Board of Health State of Louisiana:*

MY DEAR SIR—On the 2d inst. I received a communication from Dr. H. B. Horlbeck, Health Officer of the city of Charleston, asking an explanation of me of a statement which he had seen in the *New York Herald* of the 29th of July last, to the effect that the Board of Health of Louisiana had quarantined against the State of Florida.

Not being able to procure a copy of the issue of the *Herald* referred to above, I was somewhat at a loss myself to explain this extraordinary statement, until yesterday, when the reception of your letter to Dr. J. Y. Porter, of the date of July 31st, enabled me to comprehend the situation and reply to Dr. Horlbeck's inquiries.

Dr. Porter, State Health Officer of Florida, to whom your communication was addressed, is in the southern part of the State on inspection duty, and will not, probably, be able to see or reply to your letter for some days, or possibly weeks to come, and I therefore feel it incumbent upon myself to answer it. There are some points upon which I desire to define myself, in connec-

tion with your communication, and I shall endeavor to be as brief and concise as possible.

In the first place I fully recognize that "self-protection is the first law of nature" and do not claim that the agreement entered into by the several State Boards of Health, through their representatives at Montgomery in March, '89, or any other conclusions or agreements of a like character, could either compel or authorize any Boards or individuals, charged with the care of the public health, to knowingly and intentionally permit any jeopardy to the interests in their charge, which they were able to prevent or lessen. But I do claim that common as well as official courtesy is always desirable, and an element of intercourse with one another in the execution of our several trusts that we have a right to expect, as well as it is our duty to extend; and I certainly protest against the issuance of a quarantine proclamation by the State Board of Health of Louisiana, which virtually puts into contempt the reliability of the Rules and Regulations of the Board of Health of Florida, without serving notice even of such intention upon the latter body, furthermore, leaving me, as its representative, to be informed of such action through the public prints.

It was not just to either ourselves or to the public interests and convenience in our charge.

The next point to which I desire to call your attention is in connection with the position taken by you that selfishness is so inherent and predominating a trait in human nature that, in matters pertaining to quarantine particularly, we would not be warranted in risking the health of communities and States upon personal veracity. I regret to admit that I am in entire accord with you in this, and am therefore the more surprised and disappointed that your action does not accord with your expressed convictions. You rely virtually upon individuals and business corporations to give you information of themselves in these matters and refuse to trust those who have been specially charged with the care of the public health and may reasonably be presumed to have a more intelligent, as well as conscientious, appreciation of these obligations. You send special inspectors down here to watch over us and report as they please, without our knowledge. You have sent an agent this year who is not a physician, even; has never had yellow fever, and consequently Dr. Porter was compelled to forbid his going on the "Mascotte," as, under our present Regulations, no one, during the quarantine season, is allowed to board the ship when at Port Tampa who has not been thus acclimated. Of course, we are pleased to meet and facilitate your agents in everything which they may desire to take cognizance of in connection with our quarantine operations, if such knowledge is of any interest to you, or the

Health Board over which you preside. Georgia and Carolina are, however, both of them, more immediately interested and jeopardized than Louisiana, and yet they have seen proper to trust us thus far. I am not using this as an argument that you should do so, understand me, my dear sir. One other point remains to which I desire to direct your attention.

You animadvert upon the insufficient security of relying upon methods of precaution and care at the point of departure so largely, and rightly, and state that this has not proved itself altogether trustworthy in the past. Of course all methods of precaution against invasion by disease *where intercourse is allowed at all*, are to some extent uncertain; even your own most admirable system, based upon scientific experimentation, erected and sustained by abundant financial ability, and concentrated upon one great point of danger to guard and defend, must have more years of experience before certainly and perfection can be claimed for it.

A system of observation and authoritative supervision by responsible government officials at the point of departure will, in my judgment, enter largely as a factor into the quarantine systems of the future; but while I should hesitate to attach much weight to such outpost duty as it is at present performed, ordinarily, I have large reliance on Dr. Burgess in this connection; his well-known capacity and long experience in Havana, as well as his earnest desire to co-operate with the Board of Health of Florida in its efforts to prevent the importation of disease into this country through our own State, warrants me in expressing confidently the opinion that, with Dr. Burgess at Havana, with ships built and operated as are the "Olivette" and "Mascotte" and with our requirements for managing the same in connection with our methods at Port Tampa, there is a minimum of danger that Yellow Fever will be imported through that channel. Our chief risks are through the irregular channels of intercommunication, and, had we felt it necessary to impose a quarantine of detention upon those ships, those risks and dangers would have been largely increased.

*For intercourse will be kept up with Havana*, and we must shape and direct a current which we can not arrest.

We are now making all haste, within our ability, to complete and put in operation a quarantine and disinfecting station at the entrance to Tampa Bay; as you are probably aware, these things cannot be done in a day, or a year either sometimes, but we have hopes of having the "plant" ready to operate next month. Meanwhile I will venture the assurance that you will not encounter any risks to the health of your city or State through Port Tampa or the "Mascotte."

In conclusion, my dear sir, allow me to assure you of the earnest desire of the State Health authorities of Florida to guard our own State, as well as yours, against the invasion of disease; and to suggest that you will respect our motives if not our *methods* in dealing with this momentous problem.

Very truly yours,

(Signed) R. P. DANIEL,  
President State Board of Health of Florida.

OFFICE STATE BOARD OF HEALTH,  
JACKSONVILLE, FLA., August 6, 1890. }

It having been brought to the notice of this board that a certain proclamation issued by the Board of Health of the State of Louisiana, under date of July 29th, 1890, and promulgated without previous notice or protest to the Health authorities of Florida, has been given large publicity through leading newspapers over the country, and has been perverted into a reflection upon the health of our State, and that it is being utilized for detriment to our interests, it, therefore, appears to be my duty as President of the Board of Health of Florida to declare that the health of our State is good at this time, and that we have every right to feel that, under God's Providence, we shall not have any other than a like favorable report to make for the remainder of the year.

As the city of Tampa has been specially maligned in this matter, I give its mortality report for the month of July, 1890.

(Signed) R. P. DANIEL,  
President State Board of Health of Florida.

TAMPA, FLA.—Estimated population, 10,000; death rate per 1,000 per annum, 16.8.

Number of deaths, 14. Chronic Diarrhœa, 1; Gastritis, 1; Heart Disease, 1; Convulsions, 1; Disease of Bladder, 2; Dysentery, 1; Gunshot Wounds, 1; Dropsy of Brain, 1; Brain Fever, 1; Meningitis, 1; Pneumonia, 1; Purpura hemorrhage, 1; Malarial Fever, 1.

NEW ORLEANS, LA., August 11, 1890.

Dr. R. P. Daniel, President Board of Health, State of Florida,  
Jacksonville, Fla.:

DEAR SIR—I beg to acknowledge the receipt of your communication of recent date, and to assure you that neither in the action taken by the Louisiana State Board of Health in quarantining Havana passengers, nor in my letter addressed to Dr. J. Y. Porter, was any discourtesy to yourself or the Florida State Board of Health intended, and I here protest against such accusation. Had the action of our Board been directed against your



State, you would have been officially notified and all common courtesy extended.

The proclamation of this Board of Health, which you and Dr. Porter have seen proper to take exception to, was issued with a view of carrying out our quarantine regulations against Havana. We most assuredly have some rights in the premises that should be respected.

While we would not presume to ask you to change your quarantine system, or to adopt ours, we cannot and will not submit without an effort of resistance to having our rules and regulations continually violated.

The regulations of this Board have been established after years of experience in quarantine matters and we believe them to be good. We can not say to you to adopt our rules, but we can and do say to Havana passengers to stop and undergo the required period of detention and observation at the confines of our State. I think, my dear sir, we would be recreant to our trust were we to act otherwise.

The Quarantine Proclamation of the Louisiana Board of Health against Havana and other infected ports was published to the world months ago, and the presumption was that you and your Board were familiar with its terms. The recent proclamation was made only to put us in legal position to enforce the terms of the original proclamation on another approach to our city.

My interpretation of the action of the Quarantine Conference at Montgomery last year, differs widely from that put upon it by yourself and Dr. Porter. I cannot conceive that the certificate system as adopted was intended to apply to passengers from Havana. As I understand the action, it had reference to the outbreak of yellow fever in this country, and was for the purpose of allowing residents of infected cities or districts to depart without subjecting them to the cruelty attending the barbarous shot-gun quarantine.

Although full credence was to be given to the certificates, provision was made for their reception in such communities only as were willing to receive them, and under such conditions as they thought proper; the communities receiving them to be the judges of these conditions. (See Resolution in answer to topic 3).

Section 11, referring to certificates, mentioned in Dr. Porter's letter and the one preceding it apply especially to the existence of yellow fever in this country and to such people as can produce satisfactory evidence "that they have not been in twelve days exposed to any source of infection."

The certificate recommended had reference to people who had not been exposed to infection regardless of whether or not they had been acclimated. I fail to find anything in the delib-

erations of the Conference recommending or justifying such methods as your Board has inaugurated. Again, quoting from Section 11, the one referred to by Dr. Porter, it recommends that "a uniform system of certificates should be adopted by Boards of Health. We would recommend the following form" (See page 23 of report of Conference), which you will readily see is widely different from the sample of certificate furnished me by Dr. Porter. The one applies to people who have not been exposed to infection, the other to people who may be supposed to be acclimated.

I regret the occasion or necessity of our Board having to take such action as "virtually puts into contempt the reliability of the rules and regulations of the Board of Health of Florida," but, my dear sir, allow me to remind you that the rules and regulations of your Board, aside from the risk and danger we conceive to attend them, virtually puts our system into contempt, rendering it inoperative by the fact that our rules can be so easily evaded through your State. And should we recognize your system, at the same time not feeling justified in changing our rules to conform therewith, we would be guilty of the inconsistency of placing an unnecessary barrier on our own shipping and discriminating against our own interests.

The two sets of regulations, being based on different ideas diametrically opposed to each other, cannot be operated together.

You complain that we did not inform you of our intended action, and thereby committed a breach of courtesy. I would respectfully suggest that your quarantine regulations were formulated without any consultation with our Board, which is surely your privilege and one we also claim.

I would also state that the Louisiana State Board of Health, last year, protested strongly in a letter to you against this same custom.

Your accusation of inconsistency I will dismiss with the statement that I cannot think it logical or well founded, and with a regret that any personal feeling should creep into a correspondence that I consider purely of an official character.

It was not deemed necessary to send a physician as an inspector to Tampa, as the duties of the position were not of a professional nature. We consider our inspector acclimated, as he has been raised in this city and has been in the employ of the quarantine service of the State. The gentleman representing this Board last year at Tampa was a physician, and has had yellow fever, and yet your authorities refused him permission to go on vessels on their arrival from Havana. This very refusal implies that you recognize danger in these same ships to which you accord such extraordinary privileges.

One more point in connection with your system, if you will excuse me in contrasting your regulations with our own; we disinfect all clothing and baggage of passengers. After the contents of their trunks, etc., have been disinfected, they are required to don a disinfected suit, and the clothes then taken off are subjected to the same treatment. I am informed that your passengers walk right off without any detention further than is necessary to identify them by their certificates, and the clothes they wear, which may have been taken from their trunks within the hour of their arrivals, are not subjected to any disinfecting process.

I wish to return thanks for the various courtesies extended to our inspector, and assure you of our willingness to reciprocate should you ever feel called upon to send a representative to our State.

In conclusion, I trust that you will not feel that, though we cannot subscribe to your methods, your motives have never been questioned.

Allow me to show you that it is the earnest desire of the Louisiana State Board of Health to be in sympathy and perfect harmony with all neighboring health authorities, and while we may differ in opinion, we shall not be unmindful of the fact that we are working with the same object in view—the prevention and exclusion of disease.

Very respectfully,  
(Signed) S. R. OLLIPHANT, M. D.,  
President Board of Health State of Louisiana.

JACKSONVILLE, FLA., August 19, 1890.

*Dr. S. R. Olliphant, President Board of Health of Louisiana,  
New Orleans, La.:*

MY DEAR DOCTOR—Yours of the 11th inst., in response to my letter to you of recent date, came duly to hand.

I regret that there should have been anything in the matter or tone of my communication which should have caused you to consider that any *personal feeling* existed on my part in regard to the course taken by the Board of Health of Louisiana in regard to quarantine regulations. Permit me to correct any such misapprehension on your part. I have no *personal feeling* in the matter; and it would be quite ridiculous in me to entertain such. I have, however, most unwillingly accepted a responsibility for the State of Florida in the official position at present held by me, and in that capacity my protest was made, not personally against you, but against your official action. It is unfortunate that the impression should have gotten abroad that your Board has questioned the health of our State at this time.

I have not in any manner been a party to this misapprehension. But your proclamation of the 29th ultimo was being perverted by sensational or other interested parties to that purpose; and, consequently, was injuring our State's interests, and made it my duty to publish the statement which I did. There are several other points in your letter which can be responded to by Dr. Porter, perhaps, with more propriety than by myself, and I have therefore turned them over to him.

I cannot, however, close this, my dear sir, without giving you my renewed assurance of a sincere desire on my part to have our official relations work in more harmony of accord, which shall most happily accomplish our common object, i. e., the protection and promotion of the health and prosperity of our respective States.

Believe me, very truly yours,  
(Signed) R. P. DANIEL,  
President Florida State Board of Health.

CORRESPONDENCE IN REGARD TO ANNUAL INSPECTIONS  
UNDER SECTION 12 OF THE ACT CREATING A STATE  
BOARD OF HEALTH.

JACKSONVILLE, FLA., January 19th, 1891.

*To His Excellency, Francis P. Fleming, Governor of Florida,  
Tallahassee, Fla.:*

MY DEAR SIR—Section 12 of the act creating the State Board of Health provides for annual inspection by the State Health Officer of all cities and towns in the State between the first of November and the first of May of each year. As you are aware, circumstances prevented this being executed during the winter and spring of '89 and '90, on account of the cases of yellow fever in Key West during the fall and early winter of those years, which kept the State Health Officer in that portion of the State. Some few inspections were made of the towns and public institutions; notably, the State Asylum and convict camps at Monticello.

In consultation with the President of the Board, it was deemed advisable, by both the President and myself, to consult with you as to the expediency of incurring the expense to the State of carrying out the provisions of this section of the act.

The State Board of Health has been in session during the past week, and the matter was brought up then. The position taken by Mr. Hyer, of Pensacola, was that the law required it and it should be done, although he did not insist upon it. I think that Dr. Daniel and Mr. Henderson are both under the impression that, while it would result in much good, yet the



present financial condition of the State will not warrant expenditure from its funds for this purpose, which must necessarily be quite large—several hundred dollars. I am thoroughly in accord with this opinion; and, therefore, the President of the Board and myself have deemed it advisable to submit to you whether he or myself would be held censurable by the State Legislature for a violation of this section which relates to inspections. There are one or two points in the State which I should like to visit before the next annual report is made up, but I really do not think that it is demanded in the present condition of affairs that I should literally carry out the requirements of the first portion of that section in regard to these inspections.

This office has done much in the past year in correspondence and is still doing much, to stimulate the people and officials in carrying out this important work of sanitation, which will result, if carried on for a few years longer, in great benefit to the State, both to the people that are now here and those who, by immigration, it is hoped will be induced to settle in the State.

Much could be done if the Board had at least one paid representative in each county of the State, who would gather up vital statistics of the births, marriages and deaths and forward them to the central office for consolidation, publication and distribution.

\* \* \* The quarantine system of the State should be under one body, with power to appoint its own officers, collect its own fees and pay out its own money. And I think if this was done there would be less complaint in the counties along the seaboard, particularly in the southern portion of the State.

Dr. Daniel, President of the State Board, will write you on these matters, and at your convenience I should like to hear from you, as there is not much time left in which to execute the work referred to in the first portion of this letter.

Very truly yours,

(Signed)

JOSEPH Y. PORTER,  
State Health Officer.

TALLAHASSEE, FLA., January 19, 1891.

*Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.:*

DEAR SIR—I am in receipt of your favor of the 17th. Upon examination of Section of the Act to create and establish a State Board of Health, it appears to me that the matter of inspection of cities and towns is in the discretion of the Board of Health. By a careful reading of the Statute, I am impressed that the words "which, in the judgment of the Board, may be necessary for him to inspect" applies to "all cities and towns," and that no further inspection is necessary than such as the Board may think necessary. This interpretation of the law

would appear to me more consonant with sound reason, and in keeping with the intention of the Legislature. It appears to me, however, that it would be well that there should be an inspection of such places in the State as the Board think advisable without going to the expense of inspecting every city or town or other point at a railroad crossing. \* \* \*

Very truly yours,

(Signed)

F. P. FLEMING.

JACKSONVILLE, FLA., January 20, 1891.

*Dr. R. P. Daniel, President State Board of Health, Jacksonville, Fla.:*

DEAR SIR—I enclose herewith a communication from His Excellency, Governor Fleming, of the 19th inst., in regard to Section 12 of the Act to create and establish a State Board of Health, relating to inspections to be made by the State Health Officer between the first of November and the first of May of each year, as may be ordered by the State Board of Health.

All correspondence in this matter has been laid before you, and is now on file in this office. You will please note what the Governor says, and kindly inform me whether, under the present financial status and embarrassment of the State, it is your desire that I make the inspections called for under the Statute referred in its literal sense, or if you desire only special inspections to be made, you will please do me the favor to designate the points that it is specially desired that I shall visit.

An early response is respectfully requested.

Very truly yours,

(Signed)

JOSEPH Y. PORTER,  
State Health Officer.

JACKSONVILLE, FLA. January 24, 1891.

*Dr. J. Y. Porter, State Health Officer, Jacksonville, Fla.:*

MY DEAR DOCTOR—Referring to the correspondence between his Excellency, Governor Fleming, and yourself, in regard to that Section of the Act creating a State Board of Health, which directs that you should visit and inspect the cities and towns and railroad crossings in the State of Florida annually, in the intervals between the close of one quarantine season and the commencement of the next; and which correspondence has been laid before me for an expression of opinion as to its execution; I will say that I have already, in my first annual report to the Governor, stated that I considered it practically impossible to execute this part of the law unless the services of the Assistant State Health Officer were utilized for that purpose; and this course I do not think we would be justified in taking, nor do I believe that the law contemplated any such action.

As a result of the course which the State Comptroller thought proper to take in regard to the assessment and collection of taxes, the health department of the State has been deprived of the revenue provided for its support last year; and the expenditures made, therefore, for two years have virtually to depend for their liquidation upon the income from one.

The urgent indication that has been recognized by the State for the erection of a first class quarantine and disinfection station at the mouth of Tampa Bay, and the purchase likewise of a steamer to act as a tender to this station, and for police duty on the adjacent coast, have largely drawn upon this reduced revenue.

Under these circumstances I think it would be inadvisable, just at this time, to subject the State to a largely additional outlay, which would result from any attempt to execute the portion of the Act referred to, in a literal way. There are a few points in the State which should be visited; notably, Tampa and Key West, as well as such other places in the Southern portion of the State as may appear, in your knowledge and discretion, to need such inspection during the winter season; and, in addition, I would advise that you visit Tallahassee and inspect, not only the general sanitary condition of that place, but that you particularly visit and examine the State Capitol before the next session of the Legislature.

I am, very truly yours,

(Signed)

R. P. DANIEL,

President State Board of Health.

#### CORRESPONDENCE WITH MUNICIPAL AUTHORITIES OF KEY WEST, FLA.

KEY WEST, FLA., July 19, 1890.

*Dr. J. Y. Porter, State Health Officer, Jacksonville, Fla.:*

DEAR SIR—I am instructed by the Honorable Board of Commissioners of this city to communicate with you and ascertain your opinion as to whether a perfect system of the Oderless Excavator with good surface drainage would be better for this city than a system of underground sewerage.

If you remember during your last visit to this city in a conversation about the sewer system I understood you to say that with good surface drainage, water tight closets, and a perfect system of the Oderless Excavator it would be better for us than an underground system of sewerage.

I mentioned the fact to several of the Commissioners, and hence my instructions.

I am also instructed to request a reply at your earliest convenience.

(Signed)

I am, very respectfully,

WM. L. DELANEY.

City Clerk.

PORT TAMPA, FLA., August 12, 1890.

*To the Hon. Board of City Commissioners, Municipality of Key West, Fla.:*

GENTLEMEN—A reply to your query regarding the safety, in a public health sense, of the substitution of cemented vaults and pits and oderless excavator system for any system of underground sewerage *that has yet* been proposed for the island of Key West, calls for not only an affirmative or negative answer, but also an explanation thereof. The subject is one that should have most careful consideration, and upon which much could be written; far more than a brief letter will permit, and I have delayed giving your courteous communication an answer this long in order that no hasty opinion might be formed on my part and given, and that I might condense what I have to say as much as possible, consistent with the importance of the subject.

I have never seen the plan proposed by Prof. Johnson, for underground sewerage at Key West, and had but a few minutes inspection of the diagram of the West system, when Mr. West was passing through Jacksonville to his home; therefore it would be unwise for me to criticise propositions that I am not conversant with, but it will be both proper and consistent for me to state what I think should be the principles which should guide your Board in arriving at a decision as to whether an underground system of sewerage should be adopted or not.

I would advise, first, that in the adoption of *any* system you give preference to the "separate" system, that is—the separation of storm and surface drainage from house drainage. Second, that sewers should be constructed for capacity not only to carry off water, but ability to keep clean, and to accomplish this object this should be so devised as to have the requisite *inclination* as well as smoothness and uniformity of surface. Waring, in his book on "Sewerage and Land Drainage" (page 59), says: "The rate of inclination of the sewer is not necessarily at the rate of inclination of its invert, but at the rate of inclination from the surface of its water, at a given point to the surface of its water at the outlet. Where no difficulty is to be apprehended from setting water back into the house drains, or lateral sewers, that is where the only thing to be guarded against is, the overflow at the top of the man-holes; the water may be allowed to rise nearly to these overflow points, and the capacity for discharge will be increased according to the hydraulic head thus gained."

All sewers should have a velocity of flow through them of not less than one (1) foot six (6) inches per second, and wherever it is possible or practicable, of two (2) feet per second.



The following table of grades for sewers based upon this principle is thus given by Waring :

6	inch	sewers; fall per hundred feet.....	I	to 300
8	"	" " " " " " .....	I	to 400
10	"	" " " " " " .....	I	to 500
12	"	" " " " " " .....	I	to 600
15	"	" " " " " " .....	I	to 750
18	"	" " " " " " .....	I	to 900
20	"	" " " " " " .....	I	to 1,000
24	"	" " " " " " .....	I	to 1,200

Flush tanks play an important part now in sanitary engineering as assistants in keeping sewers clean, and they should not be omitted or lost sight of by your Board in the adoption of any system of sewerage for Key West. An adequate supply of water, either salt or fresh, is an imperative necessity in operating sewerage, and this method of the disposal of wastes from the city should never be entertained unless it is proposed to build water works, either of fresh or salt water, the latter being perfectly adaptable for this purpose.

I have diverted from the main question propounded to me in your communication, for the reason that *if* the propositions of Prof. Johnson, or others, to construct a system of underground sewerage for Key West, meets the requirements that I have laid down, in their general application, then *I should not advise* adopting the cemented pit and odorless excavator system as a substitute for underground sewerage; and would go further and say that I disapprove of hiding filth of any kind, and the wastes from dwellings which are thrown on the ground, the house drains from kitchens into cesspools in the yards and the privy vaults, all contain deleterious agents, which, under the heat and moisture of our tropical climate, produce and give forth disease germs, which enter our houses and produce sickness and death; and *if it is a possibility* in sanitary engineering to provide each house with the necessary receptacles for these various classes of filth, to connect such receptacles with properly constructed and amply ventilated drains, and to discharge such drains into properly constructed, adequately ventilated and surely self cleansing sewers, it would free the house and the community from its own incumbrances and dangerous products of animal waste, and be decidedly our duty to adopt.

I fully appreciate the magnitude of the responsibility devolving upon the Municipal Commission in deciding this question, and recognize that in "festina lente" your desire has been to make no mistake. If any plan for underground sewerage that may be submitted to you is not a practical problem, capable of engineering solution, and has any atmosphere of doubt surrounding it, as to its sanitary workings, I would advise that you reject

it. It is certainly better to "bear the ills we have than to fly to others we know not of," and a badly constructed and defective sewerage system would be productive of greater disaster than now threatens the Island from perennial "continued" fever, or occasional yellow fever; in fact, it would prove a decidedly powerful coadjutor of those diseases.

I am of the opinion that no uniform, that is, one general system of sewerage, applicable to the whole city, can be devised—one that will thoroughly dispose of the excremental and other wastes from dwellings and manufactories of the whole Island, and that will meet all necessary demands and requirements. The topography of the Island makes it impossible, in my opinion, to construct a safe and complete sewerage by natural grade or inclination even with the aid of flush-tanks located at short distances. There are some sections of the city that could be properly sewered in the usual way; others could, with the aid of pumping stations be freed through sewers of the organic wastes from such quarters, but a large area of the city could not be provided with any underground sewerage with safety at all; and it is a question to be deliberated upon, and thought of, if there would be any equalization of expense of operating a sewer system in certain sections of the city and the cemented vault and odorless excavator in other portions.

I do not wish to be understood as being *opposed* to sewerage for Key West. I am, on the contrary, *in favor of it*, but I would construct the system only in that area of the city where the grade will permit of sufficient fall, and then only after a supply of water, free and ample, is furnished. In the sections of the city where, by reason of the flatness of surface and want of sufficient grade, it would be unsafe to construct sewers, cemented vaults, made absolutely water-tight, of limited size and capacity, so as to compel frequent emptyings, should be insisted upon, and compelled by law to be used. These vaults or pits should not be over two feet above ground, nor two feet below the surface, and two feet in width, and not over four feet in length—this depending all together on the number of openings in the closets. These pits should be emptied by the odorless excavator as often as they are filled, and the contents should be daily treated to a plentiful supply of germicide and anti-ferments.

I make no mention of the pail, tub or trough system, for, though it can be made to work efficiently, yet it is very seldom but that it is offensive and requires great care and expense to prevent it from becoming a sanitary nuisance. Great vigilance must be exercised by the municipal authorities to prevent the pails becoming very offensive in transportation for emptying, and individuals themselves maintain an apathy to their closets, which is unexplainable, when the same individual would scorn the idea of having a foul-smelling vessel in his or her dwelling.

I think I have briefly answered your question as to the expediency of substituting the cemented pit and odorless excavator system for any plan of underground sewerage already proposed for Key West. My advice to you is to adopt a sewerage system for that area of the Island where the grade will permit it, and where it is not practicable to have sewers, with or without pumping stations, then adopt the small cemented vault with the odorless excavator and liberal use of germicides.

While recommending this latter, where the former can not be used, it is clear to me, and I would impress the same upon you, that the only method that can be considered *universally effective* and applicable for the disposal of human wastes is that of removal by water carriage. Water is surely the best vehicle, when properly controlled, for the removal of the discharges of the kitchen sink, or laundries, lavatories, and water closets and urinals.

In adopting the cemented vault for the disposal of human excrement, the question will confront you, what will you do with the house slops, waste water from laundries, bath tubs and sinks? This water contains animal and vegetable matter in solution, and is capable of putrefication and fermentation, and must be disposed of in a manner as not to affect the public health. Shall it be thrown on the ground? What then shall be done with this large amount of waste water? Supposing that it is your intention to have cemented and surface drains on each side of the street; I would advise that the waste water from all dwellings and houses be emptied into these drains and then flush the drains once a week, or oftener, if necessary. Here again I premise that a water supply is one of the sanitary improvements in contemplation for Key West. It is absolutely necessary, for without it no system of sewerage can be effective, nor without it can any cleansing of street drains be properly done. \* \* \*

Very truly yours,

(Signed)

JOSEPH Y. PORTER,  
State Health Officer.

JACKSONVILLE, FLA., January 13, 1891.

To the Honorable Board of Commissioners of the Municipality of Key West, Fla.:

GENTLEMEN—I herewith acknowledge the receipt of a communication of the 9th inst. from your clerk, requesting to be informed "what would be necessary to place said city (Key West) in such sanitary condition as will satisfy the State Board." I desire to thank you for your prompt reply to my letter of the 6th inst., and submit the following, as in my judgment, to be necessary to insure a condition of sanitation for the City of Key West:

First—The enforcement of ordinances for the cleanliness of public thoroughfares and private premises; garbage and refuse heaps should not be permitted to remain over twenty-four hours without removal.

Second—A cremating furnace should be erected for the prompt and sanitary disposal of offal, garbage and night soil and filth of every description; or dumping scows should be built and operated for this purpose. It is inimical to the health of the citizens of Key West that dumping grounds should be maintained on the Island of Key West, and the site of the present dumping ground, to the windward of the inhabited portion of the Island is a particularly objectionable nuisance in a health point of view, and should be immediately abated.

Third—The city should be provided with separate systems of sewerage and drainage, and every householder should be required, whenever practicable, to have sewer connection; where it is not possible or practicable to have sewer connection, then the pail or bucket system for the collection and disposal of human excreta should be ordered and operated; this latter system would be at a trifling expense to the householder, and under proper management could be made self-sustaining, if not a source of revenue to the city. The pit system should be abolished as soon as possible, but until proper sewerage can be constructed the objectionable features of the pit system can be lessened by requiring the pits to be water-tight by hydraulic cement, and emptied by the odorless excavator when necessary; at no time should the pits be filled to a foot of the ground surface, and should at all times be liberally treated with germicides and deodorants combined.

Fourth—An abattoir should be constructed over tide-water and operated by the city; the advantage of a public slaughter house, where animals can be inspected on the hoof before being killed for human consumption, is so patent as to require no further comment.

Fifth—At an early date a public market should be erected and conducted under the direct authority of the city; if the private markets are essential to the convenience of the public in the outlying portions of the city, they may be allowed, but always subject to the inspection of the police, who should be required to daily perform their duty in this respect.

Sixth—The streets of the city should be graded, crowned and curbed with cemented surface drains on one or both sides for carrying off storm water. Sidewalks would add much to the beauty of the thoroughfares and to the comfort of the pedestrians, but are not essential to the sanitation of the place.

Yours truly,

(Signed)

JOSEPH Y. PORTER,  
State Health Officer.



KEY WEST, FLA., February 23, 1891.

*To the Hon. Board of Commissioners, Municipality of Key West, Fla.:*

GENTLEMEN—Aware of the sentiment expressed at various times by individual citizens and committees of your city, which prefers for Key West such restrictions upon intercourse with all other parts of the State as may result in a complete severance of the same during the quarantine season from May to November, in order that this community may enjoy unresstrained intercourse with Cuban and other foreign ports, I respectfully write you as the representative of the people here to devise some plan which may be submitted through me to the State Board of Health for their consideration at the second annual meeting to be held in May next.

Your earliest attention will greatly oblige,

Yours very truly,

(Signed)

JOSEPH Y. PORTER,  
State Health Officer.

KEY WEST, FLA., March 24, 1891.

*Dr. J. Y. Porter, State Health Officer, Jacksonville, Fla.:*

SIR—I am instructed by the Honorable Board of City Commissioners to furnish you with a copy of report of Special Committee to whom your communication in relation to quarantine restrictions for this city was referred.

I am, very respectfully,

(Signed)

WM. L. DELANEY, City Clerk.

KEY WEST, FLA., March 23, 1891.

*To the Hon. Board of City Commissioners, Municipality of Key West, Fla.:*

GENTLEMEN—The committee to whom was referred the communication of Dr. Porter, State Health Officer, beg to report as follows:

I have called upon quite a number of citizens and have failed to find anyone that wishes to have the Island of Key West put under the same regulations as Cuba, during the quarantine season, excepting S. S. Lowe.

(Signed)

WM. LEDWITCH.